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ABSTRACT

Noting that a state as populous as Ohio has only two accredited library schools, this report includes a needs assessment for professional librarians through 1990, a resource assessment of available educational materials in library and information science, and an analysis of four alternative approaches: a new program model, a program transfer model, an extension model, and a consortium model. It concludes that the northeast will continue to supply 40 percent of professional employment opportunities through 1990; M.L.S. graduations from Ohio universities will be adequate for Ohio's needs through 1990; school library/media specialists needs can continue to be met; a new graduate library school is not warranted through the 1980's; extension support of the northeast and the central (Columbus) areas by Kent State is not feasible without assistance from Ohio State University; and extension programs in the Dayton area require support from Wayne State University. The report is supported by 33 tables of data, and appendices provide course information, information functions, personnel position definitions, periodical reading lists, and guidelines to library services for extension students. There are 72 references. (RAA)

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Alternative Modes for Providing Graduate Education for Librarianship In Ohio

Final Report

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Foreword

This document reports the results of the context evaluation activities conducted by the Graduate Education for Librarianship in Ohio Project and provides initial assessment of the four program options studied. The project staff hopes this report will foster further development of alternative opportunities for graduate library education throughout the State of Ohio, especially those which maximize access to Ohio residents using the most convenient, yet cost effective approach.

Members of the project staff express their appreciation to all individuals who shared their time in distributing and completing questionnaires, in providing data on programs and existing resources, and in sharing their views on the status of graduate library education in Ohio. These individuals are too numerous to name.

The project research associate, Mary T. Kim, wishes to personally thank the staff of the State Library of Ohio (i.e., word processing operators, mailroom personnel, and duplication service staff) for their assistance throughout the project. In particular she gratefully acknowledges the resources provided by Richard Cheski, State Librarian, and the staff of the Planning, Evaluation, and Research Unit, Cynthia McLaughlin and Barbara Leslie.

Preface

The Center for Library Studies was established as a research unit within the Kent State University School of Library Science in 1966. Its primary purpose was, and is, to assist the library profession in the solution of problems through research and dissemination of the results. The Center serves as a locus to stimulate both funded and unfunded faculty research. Past publications as a result of funded research have included: Library Services for the Visually and Physically Handicapped, by John A. McCrossan (1968); Colloquium on Library Networks, ed. by Edward M. Heiliger (1969); and Report of the Kent State University Task Force to Study the Library Needs of Nicaragua..., by Edward M. Heiliger and others (1974).

In a time of ferment in library education, when increasing statewide needs coexist with diminished financial resources, it is appropriate that this latest study should focus on graduate education for librarianship in Ohio and attempt to point the way to solutions that are innovative, qualitatively acceptable, and cost effective.

I would like to close these brief remarks with a few words of personal appreciation to those whose interest and support made this study possible. The Board of Directors of the Ohio Library Association unanimously recommended, on May 16, 1980, that such a study be undertaken. Richard M. Cheski, State Librarian, and Bonnie Beth Mitchell, Head, LSCA Programs, were most supportive and encouraged the submission of a grant proposal. Eugene Wenninger, Dean of Research and Sponsored Programs at Kent State University, offered helpful advice in proposal development. The

resident faculty, selected members of the adjunct faculty, and the Advisory Council of the School of Library Science all provided good ideas for consideration. The students in the Columbus Program alerted us to problems which should be investigated. A special word of appreciation is due the following members of the Kent State University Administration for their continuing interest and support: Michael Schwartz, Vice President for Academic and Student Affairs and Provost; Robert J. Alfonso, Associate Vice President and Dean of Faculties; Thomas D. Moore, Assistant Vice President; and Robert E. Powell, Dean of the Graduate College. I feel particularly indebted to the State Library Board for the grant which made possible the employment of a full-time research associate and to Mary Kim who went far beyond the call of duty in ably fulfilling the responsibilities of this assignment. The spirit of cooperation from The Ohio State University has been vital and particular appreciation is expressed to: William J. Studer, Director of Libraries, designated by OSU as primary liaison; W. Ann Reynolds, Provost; Terry Roark, Assistant Provost; R. A. Burnham, Dean, College of Education; Russell G. Spillman, Associate Dean for Program Development; and Bruce Belland, Director, School Media Program. Finally, the interest of the Ohio Board of Regents and the following members of the staff is gratefully acknowledged: Edward Q. Moulton, Chancellor; William Coulter, Vice Chancellor; and Mark Sherouse, Assistant to the Chancellor. It is hoped that the actions resulting from this Report will provide innovative and cost-effective solutions through inter-institutional cooperation that may be applicable to other disciplines.

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Table of Contents

	Page
Foreword	i
Preface	ii
List of Tables	vi
List of Figures	viii
Chapter	
I. INTRODUCTION	1
Project Background	2
Project Activities and Objectives	8
Phase One: Needs Assessment	8
Phase Two: Resource Evaluation	11
Phase Three: Evaluation of Programming Alternatives	12
II. ENVIRONMENTAL ANALYSIS	14
The Job Market for Librarians	14
Trends in Higher Education	20
Trends in Graduate Education for Librarianship	24
III. NEEDS ASSESSMENT	30
The Library Job Market in Ohio, 1976-1980	31
Regional Vacancies	34
Job Requirements	36
Summary and Implications	39
Projected Personnel Needs in Ohio Libraries, 1980-1990	42
Public, Academic, and Special Libraries	42
School Libraries	50
Supply and Demand	53
1. MLS Programs	56
2. Public, Academic, and Special Libraries	61
3. School Libraries	63
Enrollment Projections	67
Library Associates and Certificated Librarians	67
1. Community and Residency Requirements	75
2. Potential Sites for Off-campus Programs	75

Page

Student Library Assistants and Undergraduate Students Enrolled in Media Courses 78

IV. RESOURCE EVALUATION 80

Collections and Coursework 85
Periodical Collections at Potential Off-Campus Sites 94
Availability and Access 99
Guidelines for Library Services to Extension/Non-campus Students 102

V. GRADUATE LIBRARY EDUCATION IN OHIO: ALTERNATIVE PROGRAM OPTIONS FOR THE 1980'S 105

Are additional programs in graduate education in library science needed in Ohio? 105
If additional programs and/or coursework were created, where should they be located? 107
If additional opportunities for earning graduate degrees in library and information science were created in Ohio, what specific objectives should these programs establish? 109
What would be the advantages and disadvantages of each of the four program "models" given the results of the needs assessment and existing guidelines on off-campus and graduate library education programs? 111

A New Program 111
A Program Transfer Model 113
An Extension Program 115
A Consortium Program 120

A Three Phase Plan 126

References 129

APPENDICES

Page

Student Library Assistants and Undergraduate Students Enrolled in Media Courses 78

IV. RESOURCE EVALUATION 80

Collections and Coursework 85
Periodical Collections at Potential Off-Campus Sites 94
Availability and Access 99
Guidelines for Library Services to Extension/Non-campus Students 102

V. GRADUATE LIBRARY LDUCATION IN OHIO: ALTERNATIVE PROGRAM OPTIONS FOR THE 1980'S 105

Are additional programs in graduate education in library science needed in Ohio? 105
If additional programs and/or coursework were created, where should they be located? 107
If additional opportunities for earning graduate degrees in library and information science were created in Ohio, what specific objectives should these programs establish? 109
What would be the advantages and disadvantages of each of the four program "models" given the results of the needs assessment and existing guidelines on off-campus and graduate library education programs? 111

A New Program 111
A Program Transfer Model 113
An Extension Program 115
A Consortium Program 120

A Three Phase Plan 126

References 129

APPENDICES

List of Tables

Table		Page
1.	Ohio Counties Comprising Study Regions	33
2.	Regional Distribution of Professional Library Personnel in Ohio	35
3.	Vacancies by Region and Type of Library, 1976-1980	37
4.	Breakdown of Vacancies by Service Area and Library Type, 1976-1980	40
5.	Average Annual Growth and Hiring Rates for Professional and Support Staff	43
6.	Total Professional and Support Staff by Library Type: 1979, 1985, and 1990	45
7.	Number of Applicants Per Vacancy in Ohio Libraries	46
8.	Shifts in Geographical Location of Professional PAS Librarians, 1979-1990	48
9.	Annual Growth Rates in School Library Staff at Each Grade Level	51
10.	Grade Level Breakdown on Number of Certificated Librarians and Certificated Librarians with Master's Degrees: Adjusted and Unadjusted Estimates for 1985 and 1990	52
11.	Shifts in Geographical Location of Certificated Librarians and Certificated Librarians with Master's Degree, 1979-1990	54
12.	Number of Graduates Anticipated from ALA Accredited Library and Information Science Programs in Ohio, 1976-1990	57
13.	Placement Rates for MLS Graduates of Ohio Programs	59
14.	Breakdown of Placements by Library Type, 1976-1979	60
15.	Supply and Demand for PAS Positions	62
16.	Estimated Number of Master Degrees to be Awarded by Ohio Media Programs, 1981-1990	64
17.	Supply and Demand for School Library Positions at the MLS/M.Ed. Level	66

Table		Page
18.	Educational Plans	68
19.	Graduate Programs to Be Pursued by Potential Student Populations for the Period 1981-1985+	72
20.	Potential Student Population by Degree Area for the Period 1980-1985+	74
21.	Regional Willingness to Meet a Full-time Residency Requirement of One Term at a Main Campus	76
22.	Potential Sites for Off-Campus Programs	77
23.	OCLC Symbols for Twenty-three Major Collections	81
24.	Percentage of Periodicals Held by Major Collections	83
25.	Availability of Titles by Region	84
26.	Percentage of 42 Basic Sources Held for Library Science Projects	86
27.	Percentage of Reading List Titles Held by Major Collecting Libraries in Ohio: Core Courses	88
28.	Percentage of Reading List Titles Held by Major Collecting Libraries in Ohio: Courses on Organization and Administration of Libraries	90
29.	Percentage of Reading List Titles Held by Major Collecting Libraries in Ohio: Courses on the History and Philosophy of Libraries and Librarianship	93
30.	Titles Currently Subscribed to by Both The Ohio State University Libraries and The State Library of Ohio	95
31.	Titles Currently Subscribed to by The Ohio State University Libraries	97
32.	Titles Currently Subscribed to by The State Library of Ohio	98
33.	Titles Not Currently Subscribed to by Either Ohio State University Libraries or The State Library of Ohio	100

List of Figures

Figure		Page
1.	A Map of Eleven Ohio Regions	32
2.	Projected Distribution of Professional Employment Opportunities in Public, Academic, and Special Libraries, 1990	49
3.	Projected Distribution of Employment Opportunities in Public School Libraries for Librarians with Graduate Education in Library Science or Educational Media/Technology	55

CHAPTER I

INTRODUCTION

Ohio residents interested in pursuing a graduate degree in library and/or information science offered by a program accredited by the American Library Association have had the option to attend one of the following: 1) the Kent State University program, 2) the Case Western Reserve University program, or 3) an out-of-state program. Both Ohio, ALA accredited programs are located 35 miles apart in the northeastern part of the state. Residents in northwestern, central, and southwestern Ohio who have elected to continue their education in the library field have been confronted with problems such as long commuting distances, high costs of out-of-state tuition at out-of-state programs, separation from families, or indefinite postponement of graduate degrees.

Concerned with this maldistribution of graduate education for librarianship in Ohio, the School of Library Science at Kent State University sought and received LSCA Title III funding through The State Library of Ohio to assess the need for additional graduate library science programs in Ohio and to evaluate alternative methods for meeting these needs, if and where they existed. The resulting project, hereafter referred to as The Graduate Education for Librarianship in Ohio Project, consisted of three phases: 1) a needs assessment, 2) a resource evaluation, and 3) an analysis of four

alternative methods for providing graduate education in librarianship, in terms of data resulting from the preceding context evaluation activities. The four approaches examined were as follows: 1) a new program, 2) a relocation of the Kent State University program to an area of greater need, 3) a modified extension program, and 4) a consortium or consortia for providing graduate education for librarianship in Ohio.

Project Background

Before project activities and objectives are presented, a few words seem warranted on events leading up to the project as well as changes during the life of the project.

In the late sixties and early seventies, library and information science professionals proposed alternatives to correct the maldistribution of graduate education opportunities in Ohio. In 1969 Paul Wasserman, Dean of the School of Library and Information Services at the University of Maryland, analyzed the need for additional graduate programs in library education at Ohio state supported universities. He recommended that Ohio State University establish a new school of librarianship at the graduate level, that the University of Cincinnati and Wright State University explore joint offerings leading to a graduate degree in librarianship, that Bowling Green State University and University of Toledo consider similar joint ventures and that the Kent State University library school continue its expansion and program development efforts [1, p.20]. His recommendations resulted from on-site visits and interviews with regional faculty and university administrators.

In the early seventies both Ohio State University and Wright State University developed proposals for graduate programs in librarianship. Both attempts failed due to a tightening fiscal situation and its attending problems. The Ohio State University established a strong program in computer and information science and a smaller program in media. Wright State University also developed a media program. No known action was taken on the joint ventures recommended for the northwestern and southwestern portions of the state. The Kent State program, however, did continue its expansion as the only state supported, ALA accredited degree program in Ohio.

In 1975 directors of Cleveland Public Library and the Public Library of Columbus and Franklin County requested that Kent State University offer graduate courses in librarianship at the respective sites. These extension programs continued to grow through 1979 at which time 50 students were on the Cleveland mailing list and over 100 students were on the Columbus mailing list. In 1978 Kent State University signed a formal cooperative agreement with Ohio State University, permitting use of OSU classrooms and library facilities [2].

While the Columbus program was expanding, Kent State University received inquiries from southwestern Ohio regarding the offering of graduate courses in librarianship. The Library Division of the Dayton-Miami Valley Consortium, in a survey of librarians employed in the Dayton-Miami Valley region, reported that over 100 librarians were interested in taking ALA accredited graduate coursework in librarianship [3]. Since some of these 100 librarians held associate

degrees, the actual number eligible to enroll in graduate courses would be lower. In 1979 the Dean of the College of Education at Wright State University expressed interest in exploring cooperative arrangements similar to those established with The Ohio State University [4].

As interest in southern Ohio continued, the Cleveland program experienced enrollment decreases. Between 1978 and 1979 a 54 percent decrease occurred in Cleveland enrollment while Columbus enrollment rose 33 percent [2]. Several classes scheduled in Cleveland during 1979-80 had to be cancelled due to insufficient enrollment. The Kent State University library science faculty decided that factors such as access for working adults and higher tuition costs of Case Western Reserve University justified the continuation of the Cleveland program, but at a reduced level [5]. Appendix A lists the courses to be offered in the Cleveland area.

While the enrollment in the Columbus program increased, student satisfaction with the program did not always keep pace. In the Spring of 1979 some 15 Columbus students nearing completion of the MLS degree were asked to comment on the Columbus program. Most respondents stressed the need for a conduit to the main campus. Long distance advisement from the main campus remained problematic. Several cited the program's failure to provide information on university deadlines, graduation requirements, etc. Several respondents suggested a resident coordinator as a partial remedy [2].

Results of a second Columbus survey, conducted in the summer of 1979, echoed the need for a Columbus coordinator. Students complained of problems in accessing library materials for course assignments.

Too much travelling time, insufficient holdings in library science, materials lost, stolen or in use by others, and inconvenient hours were cited as difficulties. Several students noted scheduling difficulties, especially for courses with prerequisites. More frequent offering of core courses and a greater variety of electives were mentioned as needed improvements [6]. A third survey, conducted as part of a class project during Fall, 1979, revealed continued difficulty in obtaining outside reading materials, inconvenient classroom location, expensive parking at the OSU campus, and little interaction with main campus advisors [7].

In spite of these problems with both extension sites, total off-campus offerings contributed 26 percent to the Fall, 1979 student FTE and produced 21 percent of the total income of the School of Library Science at Kent. In the Fall term, 1980, the FTE share jumped to 32 percent, yielding 27 percent of the total school income [8].

In addition, a part-time coordinator was hired on a trial basis for the 1980-81 academic year. Responsibilities included teaching in the Columbus program, advising students, and providing a linkage with the main campus in Kent. As part of the OSU-KSU agreement, the OSU Main Library provided space for an extension program office.

The continued growth of the total Kent program, including extension offerings, and the opportunities for expansion into the Dayton area caused some concern among the Kent library science faculty. The ALA Committee on Accreditation, in commenting on the 1977-78 annual report submitted by the KSU School of Library Science, inquired about the potential impact of the two extension programs on the main campus

degree program [9]. With the KSU change to a semester system, the library science faculty questioned their ability to maintain the same variety of courses at the main campus and to participate in extension teaching, even with increased teaching loads [2]. Both the Committee on Accreditation and the former Dean of the Graduate College at Kent State University had emphasized the desirability of increased research productivity by the library science faculty. In the 1979-80 academic year, the average teaching load was reduced from 12 hours per semester to 10.6 hours, still exceeding the norms of other graduate library schools or other graduate units at Kent State University. To release additional time in 1980/81, the Dean of the School of Library Science proposed less frequent offering of undergraduate courses and small graduate courses plus the reduction of committee work and elimination of the former "drop-in-at-any-time" policy for student access. The fact that the position left vacant by the former Dean of the School of Library Science remained unfilled compounded the faculty load problem [10].

Central to the issue of potential faculty overexpansion was the lack of a residency requirement for the graduate library program. The late Sidney Jackson, in a letter dated April 13, 1979, addressed the residency issue as follows:

> ... I see no rational basis for pretending the totality of a graduate program, tangibles and intangibles, can be maintained without some significant time here, at Headquarters. It would seem to be proper to require the candidate to take a portion of the core here -- at least one course if not more.

> The credit requirement for the degree is 36 semester hours; it seems to me that a minimum here should be set at 10, or maybe 9 or 8. The advertising should emphasize that such work ought to be taken early in the sequence partly for the clear advantage of getting the headquarters orientation and advising. Mature persons heading toward a professional career in a tight market should have no trouble understanding that syllogism. I believe there is no doubt about the stance of the ALA accreditors. The ultimate logic of the extension plan is a correspondence curriculum, best suited to mere operational training ... [2, p.6].

Dr. Jackson's letter was followed by a recommendation from Dr. L.R. Wynar.

> It is recommended that part-time students from Columbus and Cleveland be required to take between 4-6 semester hours on the main campus.
>
> Students may take into consideration any semester or Saturday offerings in Kent. Also the concept of the weekend college may be considered in the future curriculum development. Taking into consideration that most rules have their exceptions, students with justified reasons may be exempt from this requirement pending the Dean's approval and the recommendation of the student's advisor. In view of the rather limited number of full-time permanent faculty in our school, heavy loads, university requirements for published research and professional activity (essential for school's visibility), and the accreditation committee's comments concerning our program in Columbus and Cleveland it is hoped that this recommendation will be accepted.
>
> The major benefits to our part-time students will be their exposure to our resources in terms of faculty, collection and equipment. Another important benefit to the student will be much more effective faculty advising regarding their individual program planning in relation to their future professional employment. It is recommended that this requirement be implemented with the beginning of the 1980-81 academic year. [2, pp.6-7].

At a faculty meeting on April 25, 1979, the library science faculty approved the recommendation in an advisory vote. Action was delayed pending additional study.

The Graduate Education for Librarianship in Ohio Project, funded for the period September, 1980 through December, 1981, sought to provide information to decision-makers who will address the maldistribution, overexpansion, and residency issues set forth in this background review.

Project Activities and Objectives

As stated earlier, the project consisted of three principal phases: 1) a needs assessment, 2) a resource evaluation and 3) an examination of programming alternatives. The activities and objectives of each phase are delineated below.

Phase One: Needs Assessment

Activity 1: A survey of previous and predicted personnel needs in Ohio academic, public, and special libraries [11]

Objectives 1.1: To estimate the number of professional and support staff positions that would be filled in Ohio academic, public and special libraries through 1990

1.2: To identify emerging trends in professional/support staff ratios in these three library types

1.3: To estimate the number of professional vacancies anticipated in the three library types through 1990

1.4: To obtain regional breakdowns of these estimates in order to determine areas of greatest need

1.5: To identify skills and specialities judged to be in greatest demand through 1990

Activity 2: A survey of previous and predicted personnel needs in Ohio public school libraries [11]

Objectives 1.1: To estimate the number of certificated school librarians that would be employed at each grade level through 1990

1.2: To estimate the number of certificated librarians with master's degree in library science or educational media/technology that would be employed through 1990

1.3: To estimate the number of certificated librarians with master's degree that would be hired annually through 1990

1.4: To obtain regional breakdowns of these estimates to determine areas of greatest need

Activity 3: A survey of library associates employed in Ohio academic, public, and special libraries and of certificated, non-master degreed librarians employed in Ohio public schools [2]

Objectives 1.1: To estimate the number of individuals who plan to enroll in graduate programs in library science, educational media, or computer and information science programs through 1985

1.2: To identify geographic areas of need that are currently unserved by a graduate library science program

1.3: To determine institutional sites which would serve maximum numbers of potential students

1.4: To determine the probable impact of commuting and residency requirements on potential enrollment

Activity 4: A survey of student library assistants employed in academic libraries in Ohio [12]

Objectives 1.1: To estimate the number of student workers who plan to pursue a library and information science graduate degree

1.2: To determine regional interest in each of the degree areas

Activity 5: A survey of undergraduates enrolled in library science and educational media courses in Ohio [12]

Objectives 1.1: To determine regional interest in each of the library-related degree areas

1.2: To determine institutional choice for these graduate degrees

Activity 6: An analysis of position advertisements for public, academic, special and other library vacancies in Ohio [13]

Objectives 1.1: To determine past trends in professional library vacancies in Ohio, e.g., annual number of vacancies, geographical location, type of employing library, minimum salaries, etc.

1.2: To develop a profile of minimum job requirements, e.g., experience, education, language, etc.

Phase Two: Resource Evaluation

Activity 7: A quantitative evaluation of library and information science periodical collections in the state of Ohio [14-15]

Objectives 1.1: To determine which geographical areas in Ohio have adequate library collections to support graduate education and/or continuing education programs in librarianship

1.2: To identify holdings information in twenty-three Ohio libraries with major periodical collections in the library and information science field

1.3: To develop a resource tool for instructional developers in library and information science

Activity 8: An evaluation of major library science collections in Ohio using selected course reading lists of the Kent State School of Library Science

Objectives 1.1: To determine the gergraphical regions with monographic and technical report collections in library and information science adequate to support library science courses

1.2: To determine if certain regions were better suited to support specific courses

Phase Three: Evaluation of Programming Alternatives

As mentioned earlier, the project proposed to examine four program alternatives in light of the context evaluation. This third phase examined the results of project phases one and two, the tentative results of an attitude survey of academic vice presidents, deans of colleges of education, and chairpersons of educational media departments, and information generated from review of literature pertinent to each approach. The outcomes of this phase were model descriptions,

listings of advantages and disadvantages, and preliminary budgets for implementation, where appropriate.

The results of each phase have been presented in the remainder of this report.

CHAPTER II

ENVIRONMENTAL ANALYSIS

The Graduate Education for Librarianship in Ohio Project conducted a needs assessment to determine if and where additional opportunities for graduate education in librarianship should be created in Ohio. To provide a context for these assessment data, project staff analyzed selected environmental factors impacting on program development, expansion and/or curtailment. Special attention was given to previous studies of employment opportunities for librarians and reviews of trends in graduate library schools.

The Job Market for Librarians

In 1967 a state of crisis was declared by the American library profession [16]. Research indicated that 100,000 additional professional librarians were needed in the United States to meet minimum staff levels required for delivery of quality library service [17]. In Ohio an analysis of library personnel levels echoed national findings and called for increased recruitment and program expansion by Ohio graduate library schools [18]. A decade later the number of professional librarians employed in U.S. academic, public, and school libraries had nearly doubled, jumping from 64,300 to 122,300 [19]. The number of graduate library programs

accredited by the American Library Association had also nearly doubled, yet a second inventory of national library needs reported a "shortage" of 119,000 professionals still existed [20].

The library community has since recognized that these estimates of need were greatly inflated, due in part to the underutilization of professionals through non-professional assignments but principally due to the quality assurance approach employed by the national inventories. Evaluation of existing staffing patterns and levels against ideal professional standards does not yield realistic data on employment opportunities, especially during periods of inflation, budget cutbacks and declining undergraduate enrollment. Consequently while new library schools were established in response to the publicized shortage, their graduates wondered where these 119,000 vacancies were located.

Since 1975 and earlier, the job market for librarians has been termed "a buyer's market" [21, p.360]. New graduates with geographic mobility have had the most success securing employment. Hardest to place have been those graduates with advanced degrees who lack pre-professional experience [22]. Associated with a tightening market was a decline in library school enrollments. In 1974, the average number of graduates per library school was 123; this dropped to 102 by 1976 and to 84 by 1979 [23]. Even though fewer beginning librarians were in the job market by 1979, a year-in-review article still reported "the library job market did not open up in 1980, and prospects look grim for any significant improvements in the decade ahead" [24, p.120].

Predictive studies have supported these conclusions. In a 1972 study of library personnel supply and demand, the Bureau of Labor Statistics (BLS) predicted that the main source of employment between 1970 and 1985 would be due to replacement and not expansion. The BLS report estimated that 11,200 professional positions would open each year between 1970 and 1985, 80 percent of these being filled by recent graduates of bachelor and master degree programs in library science. BLS estimated an entry rate of 80 percent for new graduates, creating a pool of about 9,000 beginning librarians each year. The BLS report therefore concluded that few position (i.e., 2,200) would be available for re-entry, job transfers, etc. [25].

More recent assessments have indicated that the number of new graduates and re-entrants to the field will probably exceed the number of openings, with a competitive job market continuing through the 1980's [26]. Slower growth has been predicted for public libraries, especially due to the growing reliance on support staff and volunteers. Research has confirmed that public libraries have employed more library associates, that library associates have performed functions similar to entry-level professionals, and that public library administrations have been satisfied with the performance of library associates on entry-level professional tasks [27].

Predictions further indicated that growth of professional academic library staff should be non-existent in the next decade due to declining student enrollment. Modest growth for school libraries has been predicted for the 1980's, because of projected increases in elementary level enrollments as the second generation

of the post-war baby boom reaches school age. Highest levels of growth have been predicted for special libraries and for the commercial information industry [26].

The greatest demand is anticipated for the following specialties: community outreach librarians, media/audiovisual specialists, library automation personnel, and administrative and supervisory professionals. While most positions will continue to require a master's degree in library science (MLS) or a master's degree in education (M.Ed.), it is expected that undergraduates in education with media specialization will be competitive with MLS degree holders when seeking school library openings [25 p.40]. This suggests that the modest growth in school library positions might not drastically ease the market for MLS graduates.

Entry-level requirements are predicted to rise due to the increasingly technical nature of jobs in all fields. Perhaps this results from the assignment of previous entry-level tasks to non-professional personnel. BLS predicted that new graduates, with their up-to-date training, should be more attractive, especially since they may accept lower starting salaries than experienced professionals. To the extent that experience is preferred, then re-entrants or transfers should have the advantage.

That new MLS graduates may be required to compete with experienced, non-MLS degree holders is an issue raised by the Minimum Qualifications for Librarians Task Force of the ALA Office of Library Personnel Resources. The task force cautioned against using the MLS degree as a minimum requirement for all professional positions since this educational requirement has not been validated as a job-related

criterion. Such validation is required under the Equal Employment Opportunity Act of 1972. Libraries have independently exercised such caution. The Library of Congress has not required the MLS degree for several years. In 1976 the Ohio Civil Service Commission eliminated non-performance related tests and educational requirements from its classification system. Library positions specify number of courses or type of experience required; the MLS degree is no longer mandatory [28].

The BLS projections for library personnel supply and demand through 1985 reflected the Ohio situation as well. In 1970 the Ohio Board of Regents commissioned a study of library education and library personnel needs, findings to be used to guide development of the 1971 Master Plan for Higher Education [29-30]. The study reported that a rough balance of professional openings and new graduates would exist between 1971 and 1975. Study results pointed to an oversupply of graduates by 1980, the situation worsening through 1985. These conclusions were based on comparisons of projected degrees awarded and projected professional vacancies through 1985. The study indicated the reverse would hold true for BA level library staff. Not only would the supply of support staff be deficient, but the number of certificated personnel available for school library positions would be inadequate. If the recently proposed minimum standards for Ohio public schools were to be approved, this situation would be compounded. In order to meet the proposed ratio of one certificated librarian for every 750 students district-wide, Ohio public schools would need to hire over 950 certificated librarians, at an estimated cost exceeding $19-million [See 12, Appendix J].

The events of the past year have partially validated these earlier predictive studies. The economic crunch of 1980-81 resulted in library branch closings, reduction of hours of service, and elimination of professional positions [31]. State libraries, public libraries and academic libraries all faced constricted budgets. The elimination of Comprehensive Employment and Training Act employees accentuated personnel reductions [24].

As reviewers of the political scene noted, libraries [32] and education in general [33] have lost many of their supporters in Washington, D.C. While the federal funding of library programs should be safe through June, 1981, the prospects for the following year are uncertain. President Reagan's proposed budget would consolidate school library programs with 34 other programs in block grants, funding these programs at 72 percent of the current level. The college library program (i.e., Higher Education Act II-A) would be eliminated in FY 1982, although library training and research and demonstration (II-B) and research libraries (II-C) could retain their current level of funding. LSCA Title I monies would be reduced 25 percent. Postal subsidies would be cut and CETA public service jobs would not be revived [34]. Other proposed cuts which could impact on library services and the library job market are the proposed abolishment of the Institute of Museum Services, a 45 percent reduction in funding for the National Endowment of the Arts [35], reduction of funds to the National Endowment of the Humanities and the National Science Foundation, and the elimination of monies for grants from the National Historical Publications and Records Commission [36].

On the plus side, a member of the U.S. House of Representatives recently proposed the establishment of an Institute of Information. This $8-million institute would study international trends in information-collection techniques, make recommendations about education and research programs related to information science, and study alternatives for information systems in the United States. The Institute would assume former responsibilities of the National Science Foundation in this area [37].

Trends in Higher Education

Higher education was recently described as existing in a state of "impending crisis." It was suggested that the "club of hard times was already pounding the academy with increasing force" before the proposed budget for FY 1982 was even released [38, p.9]. The magnitude of the proposed cuts, however, brings the crisis closer to reality.

The FY 1982 budget proposed a 25 percent cut in the Department of Education, reducing its budget to $12.4-billion, $6-billion of that being earmarked for higher education [36]. On the Ohio scene, the House budget has higher education receiving about 14 percent of the proposed budget, approximately the same percentage as that of preceding years. The total budget, however, would be reduced and higher education would receive about $100-million less than the amount recommended by the Ohio Board of Regents [39]. It should be noted that Ohio support for higher education has been marginal. A 1978 survey showed that Ohio ranked 45th in the nation in 1977-78 appropriations per capita for higher education [40].

These cuts partially reflect the "loss of public confidence in the value and utility of higher education" [40, p.2]. Factors contributing to this include:

> ... campus unrest in the '60s' the perceived lowering of standards and requirements for admission and success in college; the proliferation of programs; the loss of uniqueness in holding a BA degree ...; the seemingly large number of individuals who have been disappointed in the quality of their educational experience; the exposure to the public of college graduates who are lacking in basic skills ... Beyond these factors, there is the recognition that the social and economic argument that has often been blatantly or subtly advanced for going to college - you'll get a better job, have doors opened for you, lead a better life, meet good friends who will help you later in life - may not be totally or even partially accurate ... [40, p.2]

Changes in enrollment patterns have occurred. Predictive studies forecast declining enrollments for the next two decades. A recent study by the Carnegie Commission, considered to be a more optimistic study, projected a 5 to 15 percent decline in undergraduate enrollment between 1980 and 2000. Forty percent of this decline would occur between 1983 and 1988, followed by a two-year period of slight recovery. The second slide, occurring between 1991 and 1997, would constitute the remaining 60 percent of decline. These declines were projected due to an anticipated 23.3 percent drop by 1997 in the 18-24 age group. This downturn in the college age population would be partially offset by increased enrollment by 25^{+} students, women, minorities and part-time students, if predictions hold true.

No specific projections were made in the Carnegie study relative to graduate enrollment. Graduate enrollment was expected to rise, in relation to undergraduate enrollment. The magnitude of graduate decline would probably not exceed 10 percent. The study projected most decline would occur at the doctoral level with continued growth in master level programs [41].

Regional variations were anticipated. The study predicted that Ohio colleges would fare much worse than national averages. Some two year colleges might even be closed. The Board of Regents' predictions of a 20-30 percent decrease for 1990 were viewed however as overly pessimistic [42]. The Board of Regents expected that Ohio residential universities (e.g., Bowling Green State University and Kent State University) would experience sharp decreases in full-time undergraduate enrollment. Urban universities (e.g., Ohio State University and Cleveland State University) might offset this by increases in the 25^{+} age group and part-time students [43].

To date enrollments have remained stable. In fact, a recent study reported applications were up 10 percent for the Freshmen class, Fall, 1981 [44]. The U.S. Census Bureau also reported that between 1974 and 1979, enrollment of 25^{+} students rose 25 percent, compared to a 10 percent increase for traditional college age students. The Census Bureau concluded that if these rates of attendance for the 25^{+} age group remained constant for the next two decades, that number of students enrolled should increase because of projected growth in the over 25 population. The decline in

traditional college age enrollment would not be completely counter-balanced since older students tend to be part-timers [45].

The proposed budget cuts in student aid programs for FY 1982 only add to the uncertain enrollment picture. The Guaranteed Student Loan Program and Pell Grants funding would be reduced and social security benefits for college age students, eliminated. The recent $100-million cut in U.S. loan funds could result in a 70 percent slash of student aid for some colleges, according to a recent analysis. The amount of National Direct Student Loan funds allocated for Ohio is 44 percent less than previous levels [46]. Given that state support for higher education is based on enrollment-driven formulae, enrollment declines, coupled with continued inflation and reduced federal funds, create great uncertainty for the future of higher education.

These changing enrollment patterns have prompted acceleration in institutional competition. More community oriented and lifelong learning programs have been offered to attract older groups. There has been renewed emphasis on recruitment and some concern about lowering of admissions standards. Cuts in 1980-81 state budgets across the country have resulted in elimination of programs, potential release of tenured and/or tenure track faculty, and lay-offs of non-academic personnel [47]. Institutions compete to maintain quality, meet inflationary costs, replace equipment, and provide salary increases [40].

A study sponsored by the Council for Interinstitutional Leadership offered four options for colleges' survival in the coming decades: 1) survive alone, 2) develop substantial voluntary

cooperation, 3) accept publicly mandated cooperation or 4) terminate operation [48]. The "cooperative ethic" has been termed crucial for survival. Since cooperation requires compromise, some loss of institutional antonomy, it has not been readily accepted. According to a report on a recent conference on interinstitutional cooperation, only Illinois has encouraged consortia through state legislation, state subsidy, etc. [49]. Nevertheless over 130 voluntary academic consortia exist in the United States. In Ohio examples include the Cleveland Commission on Higher Education, the Consortium for Health Education in Northwestern Ohio, the Dayton-Miami Valley Consortium of Colleges and Universities, the Greater Cincinnati Consortium of Colleges and Universities, the Northeastern Ohio Universities Colleges of Medicine, and the Ohio College Association [50].

Higher education will not know the exact amount of federal and state funds available for 1981-82 until final budget approval. Any alternative programming for graduate education for librarianship in Ohio must consider the impact of the tightening economy on developmental efforts.

Trends in Graduate Education for Librarianship

Between 1970 and 1976, the number of library schools increased by 28 percent, but library education experienced a 9 percent decrease in the number of full-time students and a 14 percent decrease in the number of part-time students. The number of degrees awarded annually by each school dropped by 10 percent [51]. The earlier review of the job market indicated that while the number of annual graduates

consistently declined through 1980, the job market remained highly competitive.

Despite these enrollment reductions, many library schools have considered proposals for lengthening the MLS degree program. In early spring of 1980, deans of the ALA accredited library programs met at Columbia University to examine two-year programs. Proponents of the extended curricula enumerated these advantages: 1) more time for basics and for the development of a specialization, 2) opportunity for practical experience through internships and "residencies," 3) production of fewer, yet better prepared librarians, 4) reduced class sizes and the offering of more advanced courses, and 5) maintenance of quality even with a smaller number of entering students. Concerned skeptics focused on the effect extended curricula would have on enrollments, student costs, and program budgets (e.g., high costs of coordinating internships and field placements). The question of financial pay-off for students was raised: would a two year degree holder receive higher initial salaries? It was correctly noted that none of the projected benefits of two year programs had been empirically validated nor had other options for improving curriculum been examined (i.e., elimination of unessentials, utilization of instructional technology, shifting introductory courses to the undergraduate level, promotion of the sixth year specialist degree for acquiring an area of specialization, etc.) [52].

The debate over the most appropriate curriculum structure for graduate library education has been fueled by two events: the Conant Report, released in 1980 and the minor exodus of librarians

to non-traditional library careers. For example, Conant, after an extensive study of library education, recommended the following changes: 1) reduction of the number of accredited library schools and their enrollments to mesh with personnel needs, 2) enrichment and extension of the master's program to permit coverage of foundamentals, an internship or practicum, and development of a specialization, 3) admission of only those students demonstrating potential for professional roles, 4) improved relevance of programs by appointing qualified faculty and by promoting faculty - practitioner exchanges, 5) development of cooperative ventures with state libraries and professional associations in continuing education endeavors and, 6) development of a national plan for the education of library professionals. The report prompted some negative reactions in the library education community with its recommendation that some schools be closed and others shift their mission from graduate to undergraduate preparation [53].

Even in the early seventies, critics of traditional library education urged librarians to become integral members of the information institution, cutting their ties to a specific institutional type, i.e., the library. They argued that continuation of the present mode of library education would result in an oversupply of inadequately trained professionals lacking the basic skills to support expanding library and information services. Curriculum change needed to be complemented by recruitment of aggressive students and upgrading of faculty competence if the proposed changes were to be realized. Continuing education workshops, advanced certificates offered through

joint instructional programs of library, information, and communication schools, and two-year programs were viewed as methods of upgrading existing professionals and preparing new ones. The same concerns were raised in 1974 as in 1980: 1) would there be a financial pay-off for continuing education and/or two-year degrees? 2) would the two-year degree split the profession and 3) would the extended program be more of the same? [52].

This stated need for more professionals able to deal with the total information process is evident today. A recent report noted the current shortage of computer scientists could impede the U.S. progression from an industrial to an information society. A National Science Foundation study reported that information-related jobs account for half of the total U.S. labor force and 45 percent of the gross national product. To remedy the shortage of trained personnel, the study recommended the establishment of a national commission to coordinate professional,industrial, governmental, and educational programs supporting computing in higher education [55].

The definition of needed specialists as computer scientists is rather narrow. A University of Pittsburgh - King Research study developed a national profile of information professionals which divided the profession by nine generic functions. These functions are listed below along with the percentage of professionals performing each function.

1) Managing information operations, programs, services or databases (17%)

2) Preparing data or information for use by others (13%)

3) Analysis of data and information on behalf of others (16%)

4) Searching for data and information on behalf of others (6%)

5) Information systems analysis (16%)

6) Information systems design (6%)

7) Operational information functions (excluding management) (17%)

8) Educating or training information workers, (3%) and

9) Information research and development (1%) [56, pp.18-19]

Appendix B contains a full description of activities comprising each function as well as sample occupational titles.

The study prepared estimates on the number of information professionals and their locations in the United States. Of 1,641,000 professionals, 71 percent were located in industry, 2 percent in colleges and universities, 5 percent in federal government, and 22 percent in state and local governments. "Computing" characterized the work field of 42 percent of the professionals, followed by libraries (10 percent), management support (10 percent), information services (9 percent), research, science or engineering (8 percent), and education and training (8 percent) [56].

A growing number of professional librarians have "left" the library profession, applying their skills in one of the other information fields listed above. Surveys of graduate librarians in alternative careers indicated this minor exodus stems from lack of challenge and freedom in traditional positions, limited advancement opportunities, the competitive employment situation, the repetitiveness

of many library jobs, and general dissatisfaction with the professional climate of libraries [57-59]. Alternative careers were located in publishing, bookstores, vendors, universities, networks, library suppliers, computer services, consulting firms, research centers, etc. A large number had chosen to free lance, some owning their own businesses.

Library schools, recognizing the tight job market for their graduates, have offered workshops and courses on alternative careers for librarians. A recent Library Journal editorial cautioned against potential denigration of the profession of librarianship, warning:

> Let's not mislead people into thinking that a library school is the best place to learn such occupations as systems analysis, bookstore management, or a host of other positions in the new information world. It would be better to direct applicants to schools where such training is traditionally given.
>
> In short, while we welcome the good news that librarians are useful to a host of fields, let's make sure we don't downgrade librarianship itself, create false placement expectations, or claim for ourselves competencies that we clearly don't teach or possess, and thus do damage to the credibility we need so badly to demonstrate our very necessary role - as librarians - in this society. [60, p.2249]

Library education and higher education in general are entering a period of uncertainty and change. Any committee developing program alternatives for graduate education for librarianship must carefully weigh this economic and educational environment in its planning efforts.

CHAPTER III

NEEDS ASSESSMENT

The report submitted to the Ohio Board of Regents by the 1971 Master Plan Review Committee on Library Science concluded with the following recommendations regarding new program development:

> With regard to all proposals that come before the Regents, especially proposals which embody endeavors to develop fresh concepts, we urge that due consideration be given to the capability of present programs to carry out the intended missions. Where present programs are unsuited to the proposed tasks, careful scrutiny of the proposal will be called for. We recommend that this scrutiny of new proposals in library science should embody the following criteria:
>
> 1. Desirability of the program in light of the current and future manpower needs of the library profession in Ohio...
>
> 2. Evidence of adequacy in library holdings and facilities (there is a specialized library science literature which is not typically collected in academic libraries)...
>
> 3. Evidence of willingness to enroll by a sufficient number of students to make the program viable ... [29, p.47]

The first phase of the Graduate Education for Librarianship in Ohio Project provided such data. It focused on assessing past trends in Ohio's library job market as reflected in job advertisements,

projecting personnel needs in each of the four library types in Ohio, and estimating potential enrollment for graduate library education programs. Assessment studies examined trends for both the state as a whole and its various regions. Regional breakdowns suggested areas where additional programs must be justified. The second project phase, resource evaluation, provided similar regional analysis of library resources.

Throughout the first two project phases, data was aggregated by areas roughly approximating ALSO regions (e.g., CALICO, COIN, etc.). Figure 1 illustrates these regions and Table 1 lists the counties comprising each region. Broader geographical regions were also employed as follows: Northwest (NORWELD and WORLDS), Northeast (INFO/CAMLS, MOLO and NOLA), Central (CALICO and COIN), Southeast (OVAL and SOLO), and Southwest (MILO and SWORL/GCLC).

Findings of each of the assessment studies are summarized below. Readers interested in more details are referred to the series of related papers resulting from the needs assessment phase [i.e., 11-13]. Objectives of each study were listed in the introduction to this report.

The Library Job Market in Ohio, 1976-1980

A content analysis of advertisements for professional vacancies in Ohio was performed in November, 1980. Four periodicals were selected: 1) Library Journal, 2) American Libraries, 3) College and Research Libraries News, and 4) Ohio Library Opportunities. These periodicals give fairly comprehensive coverage for those Ohio

Figure 1

A Map of Eleven Ohio Regions

Table 1

Ohio Counties Comprising Study Regions

CALICO	NOLA	SOLO
Delaware	Ashtabula	Belmont
Fairfield	Columbiana	Guernsey
Franklin	Geauga	Harrison
Licking	Lake	Jefferson
Madison	Mahoning	Monroe
Union	Portage	Morgan
	Trumbull	Muskingum
		Noble
		Perry
		Washington
COIN	**NORWELD**	**SWORL**
Ashland	Defiance	Adams
Crawford	Erie	Brown
Knox	Fulton	Butler
Marion	Henry	Clermont
Morrow	Huron	Clinton
Richland	Lucas	Fayette
Wayne	Ottawa	Hamilton
Wyandot	Paulding	Highland
	Sandusky	Warren
	Seneca	
	Williams	
	Wood	
INFO/CAMLS	**MILO**	**OVAL**
Cuyahoga	Champaign	Athens
Lorain	Clark	Gallia
Medina	Darke	Hocking
Summit	Greene	Jackson
	Miami	Lawrence
	Montgomery	Meigs
		Pickaway
		Pike
		Ross
		Scioto
		Vinton
WORLDS	**MOLO**	
Allen	Carroll	
Auglaize	Coshocton	
Hancock	Holmes	
Hardin	Stark	
Logan	Tuscarawas	
Mercer		
Putnam		
Shelby		
Van Wert		

positions advertised both nationally and locally. For each position advertised between January 1, 1976 and October 31, 1980, the following information was recorded: 1) name of employing institution, 2) type of institution, 3) educational requirements, 4) experience required, both type and number of years, 5) language requirements, 6) service area of position, 7) level of position, and 8) minimum salary offered. Since public school libraries do not typically advertise in these periodicals, the analysis restricted its conclusions to job trends primarily in public, academic, and special libraries, and secondarily to trends in library-related agencies; e.g., library networks, library science schools, etc.

Regional Vacancies

During the five year period examined, 544 professional positions were advertised; 47 percent being in Ohio public libraries, 34 percent in academic libraries, and 10 percent in special libraries. Academic libraries experienced a decrease in number of vacancies, dropping from 39 percent in 1976 to 28 percent in 1979. A reverse of that trend occurred in 1980 with 35 percent of the vacancies appearing in academic libraries.

Regional distributions of total number of professionals currently employed were compared to distributions of professional vacancies. Table 2 show that the Cleveland area (INFO/CAMLS) employed 29.8 percent of the total number of academic, public, and special librarians. The Columbus area (CALICO) employed 16.8 percent; Cincinnati (SWORL/GCLC), 10.7 percent; and Toledo

Table 2

Regional Distribution of Professional Library Personnel in Ohio[1]

Region	Overall	Academic	Public	Special[2]	School[3]
Northwest	14.7	14.2	14.9	4.7	16.7
Northeast	40.5	34.4	49.4	39.6	35.3
Central	18.4	22.1	14.3	36.5	16.9
Southeast	6.5	2.6	5.0	2.5	9.6
Southwest	19.9	26.7	16.4	16.7	21.5
	100.0%	100.0%	100.0%	100.0%	100.0%

1. 1979 data were reported for academic, special, and school libraries. 1978 data were reported for public libraries. The sources for all data were the annual statistical directories published by The State Library of Ohio.

2. Special library figures included both professional and non-professional positions.

3. School library data were aggregates of regional totals of certificated library personnel reported annually by The Ohio Department of Education.

(NORWELD), 9.7 percent. As Table 3 indicates however, during the five year period over one-fourth of the vacancies occurred in the CALICO region (27%), with the INFO/CAMLS (16%) and the NORWELD region (12%) having the next highest frequencies. Since the Ohio Library Opportunities is published at The State Library of Ohio in the CALICO region, the high percentage for CALICO listings might be due, in part, to the proximity of the publication's office. It also might result from a decline in the number of positions to be filled in the Cleveland (INFO/CAMLS) area.

CALICO had the most even breakdown of opportunities for the five year period with 37 percent of its vacancies being academic ones; 32 percent, public; and 24 percent, special. INFO/CAMLS was the only other region with a similar variety. Public library positions dominated almost all other regions, with the exception of SWORL/GCLC with its 62 percent academic openings.

Job Requirements

The MLS degree was required or desirable for 75 percent of the positions; 12 percent required or preferred an additional graduate degree. Over 70 percent of the positions required or desired applicants with experience. In looking at specific types of experience, it was found that only 25 percent of the advertisements specified administrative experience. Less than 50 percent mentioned specific types of experience, e.g., a children's librarian with experience in children's services. Finally less than 10 percent of the advertisements included foreign language abilities as a job qualification.

TABLE 3

Vacancies by Region and Type of Library, 1976-1980

REGION	TYPE				
	OVERALL[1] (N=544)	ACADEMIC (N=186)	SPECIAL (N=55)	PUBLIC (N=253)	INSTITUTION (N=9)
CALICO	27.0	29.5	63.5	19.0	0.0
COIN	6.0	4.0	3.5	6.0	34.0
INFO/CAMLS	16.0	15.0	16.0	17.0	0.0
MILO	7.0	10.0	4.0	8.0	0.0
MOLO	3.5	0.5	2.0	5.0	0.0
NOLA	7.0	7.0	0.0	10.0	0.0
NORWELD	12.0	11.0	2.0	15.0	11.0
OVAL	7.0	7.0	2.0	7.5	11.0
SOLO	4.5	0.5	0.0	7.5	22.0
SWORL/GCLC	9.0	15.5	7.0	3.0	22.0
WORLDS	1.0	0.0	0.0	2.0	0.0
	100.0%	100.0%	100.0%	100.0%	100.0%

1. Overall percentages include 41 positions available on teaching faculties, in consortia, networks, and other information agencies.

Educational and language requirements were also analyzed by library type. Academic, public, and institutional libraries required the MLS degree for 60 percent or more of their vacancies. Academic libraries actually had the highest educational requirements since a second master's degree was preferred or required for approximately 32 percent of their vacancies. Special libraries gave the lowest emphasis to the MLS degree. In fact 36 percent of special library postings stressed non-library degrees corresponding to the institution's mission. Of the few positions citing foreign language criteria, most occurred in academic libraries or teaching faculties of library science and educational media.

Library consortia and other library-related agencies had the highest percentage of positions which required experience. Applicants for more traditional positions found that academic libraries placed highest emphasis on experience (82%), followed by public libraries (69%). Only institutional libraries and teaching faculties had fewer than 50 percent of their advertisements citing experience as a job qualification. Three years of experience was the median required for academic, public and consortium positions; two, for special. Public libraries generally specified four years minimum administrative experience for those positions requiring it; consortia, three to four years; and academic, two years. Finally academic and public libraries generally required three years of specific experience; library consortia, and special libraries, two. These are all median number of years.

Yearly postings were broken down by service area to determine which skills were most marketable during the five year period and to

determine if any trends emerged. Individuals with administrative skills were most in demand, even though only 25 percent of all positions specified administrative experience. Reference, circulation, and other public service positions continued to be available. Technical service positions decreased between 1976 and 1979, with 1980 showing a reversing trend. Other positions generally demonstrating an upward trend in demand were children and young adult services, outreach, and computer and systems analysis. The demand for media personnel also increased slightly.

Table 4 analyzes vacancies by service area and library types for the five year period. The most obvious trends are summarized here. Public libraries emphasized administrative positions. Technical services and public services were emphasized more by academic and special libraries. Public libraries had a high percentage of their openings in children and young adult services. Media personnel were needed by all three library types. In general the three library types had more social science openings than science openings, contrary to national trends [see 23].

Details on position level and minimum salary appear in the study report [13].

Summary and Implications

A conservative estimate of the number of professional positions available yearly ranges from 100 to 110, if the past trends continue. This does not include school library positions or positions existing in small, rural libraries which do not advertise at the national or

TABLE 4

Breakdown of Vacancies by Service Area and Library Type, 1976-1980[1]

SERVICE AREA	LIBRARY TYPE		
	ACADEMIC (N=182)	PUBLIC (N=225)	SPECIAL (N=44)
1. Administration	14.0	39.0	9.0
2. Technical services	22.5	4.5	18.0
3. Public services	27.0	12.0	30.0
4. Children's and young adult's services	0.0	24.0	0.0
5. Outreach	0.0	5.0	7.0
6. Media	6.0	4.5	7.0
7. Serials	6.0	1.0	2.0
8. Government documents	0.5	0.0	4.5
9. Subject specialists: Social sciences	6.0	2.0	16.0
10. Subject specialists: Humanities	7.0	0.5	0.0
11. Subject specialists: Sciences	4.0	0.0	2.0
12. Archives, rare books	2.0	0.0	0.0
13. Computer and system analysts	3.0	0.5	4.5
14. User education	2.0	7.0	0.0
	100.0%	100.0%	100.0%

1. Advertisements for public (N=28), academic (N=4), and special (N=11) library vacancies not falling into one of the above service areas have been excluded from this breakdown.

state level. Annual vacancies occur pimarily in the metropolitan areas: Columbus, Cleveland, Cincinnati and Toledo. Two ALA accredited library schools currently serve the northeastern region. The off-campus program of Kent State University serves the central region. Graduates from these two regions have the widest variety of positions to choose from, openings having been advertised for all three principal library types.

Graduates having worked prior to or during their master degree programs would appear to have an advantage. Individuals with administrative skills, children and young adult service experience, outreach programming capabilities, media skills, and computer programming backgrounds also would be more competitive.

What then are the implications for graduate education in librarianship in Ohio? The areas most likely to provide employment opportunities are the Cleveland and Columbus areas. Continuation or development of library education opportunities should logically be targeted for these areas. In addition degree programs and continuing education programs which respond to the needs of the working paraprofessional and professional librarian should have higher placement rates, the demand for experience being what it is. Also those programs incorporating practicum and internship experiences could provide portions of the requisite experience. Finally it would seem that students must have a wide spectrum of courses to choose from, i.e., those for specific library types and those on specific content areas such as management, computer programming, media, etc. These data suggest that two-year programs or at

least expanded curriculum with opportunities for specialization might also be considered in development of alternative program options in the state.

Projected Personnel Needs in Ohio Libraries, 1980-1990

A survey questionnaire was sent to a sample of library directors, personnel directors, school superintendents, and district level library coordinators. The sampled libraries employed 80 percent of the total public, academic and special library professionals in Ohio and 50 percent to the total certificated school librarians. Appendix C contains personnel definitions employed in the study. Previous employment trends (i.e., 1976-1979), anticipated growth, and anticipated demand through 1990 were examined.

Public, Academic and Special Libraries

As Table 5 illustrates, public libraries will experience slowing growth rates through the 1980's compared to previous years. Academic libraries predict virtually no expansion of professional staff through 1985 but anticipate renewed expansion in the latter part of the decade. Special libraries estimate steady rates of growth but far below pre-1980 levels. A comparison of professional growth and replacement rates confirms BLS predictions that most job openings will result from replacement and not expansion needs [25].

Unlike the Bureau of Labor Statistics, Ohio public, academic, and special libraries anticipate little change in support/professional staff ratios. Professional expansion rates are expected to exceed

Table 5

Average Annual Growth and Hiring Rates
for Professional and Support Staff

	Rate of Expansion		
Library Type	1976-79	1980-85	1986-90
Public			
Professional	2.0%	1.8%	1.7%
Support	-1.2%	0.6%	0.9%
Academic			
Professional	1.5%	-0.2%	4.4%
Support	0.2%	0.5%	1.2%
Special			
Professional	38.4%	2.2%	2.2%
Support	-1.5%	1.1%	.2%

	Rate of Replacement		
Professional Staff	1976-79	1980-85	1986-90
Public	8.6%	6.6%	7.5%
Academic	9.3%	7.5%	7.1%
Special	7.3%	7.6%	8.1%

support staff growth rates in public libraries, the largest employing library type. On the average, public and special libraries will meet the minimum support/professional ratio established by the National Inventory of Library Needs (2:1), but academic libraries will fail to do so [20].

Table 6 summarizes the total number of professional library positions that should be funded through 1990. It should be noted that all totals are underestimates since the sample represented 80 percent of the total professional population. Estimates were adjusted by probable growth in non-respondents, details appearing in the full report [11].

By 1985, Ohio public, academic and special libraries should employ roughly 1,980 professionals and 4,720 support personnel. The majority of professionals will be located in public libraries (1,220) with approximately 660 academic librarians and 110 special librarians. By 1990 professionals should number 2,050 and support personnel, 4,780.

If trends reported in Table 7 hold for the next five years, then librarians will face increasing competition for public library and special library openings. Number of academic applicants should remain constant or perhaps even decrease. It should be noted however that compared to other vacancies, academic library positions receive more national advertisement so local librarians may face more out-of-state competition for these positions [13].

The survey requested predictions of specializations that libraries would need most and least in the coming decade. In

Table 6

Total Professional and Support Staff
By Library Type: 1979, 1985, and 1990

		Unadjusted*		Adjusted+	
Type	1979	1985	1990	1985	1990
Public					
Prof.	1,083	1,186	1,206	1,217	1,243
Supt.	3,268	3,249	3,279	3,285	3,324
Academic					
Prof.	644	658	687	654	696
Supt.	1,134	1,138	1,152	1,155	1,175
Special					
Prof.	96	108	111	111	114
Supt.	239	276	277	281	281
Total					
Prof.	1,823	1,952	2,004	1,982	2,053
Supt.	4,641	4,663	4,708	4,721	4,780

*These totals include the 1979 data for non-responding libraries plus the predicted staff size of responding libraries. Totals are therefore conservative estimates for sampled libraries (80%).

+These totals include the 1979 data for non-responding libraries, adjusted by growth rates for each period, plus the predicted staff sizes of responding libraries. Totals may therefore be more liberal estimates for sampled libraries (80%).

TABLE 7

Number of Applicants Per Vacancy in Ohio Libraries

	Increased	Same	Decreased
Overall (N=110)	55.5%	29.0%	15.5%
Academic (N=31)	45.2%	32.3%	22.5%
Public (N=59)	61.0%	25.4%	13.6%
Special (N=20)	55.0%	35.0%	10.0%

general all three library types believed the application of computer technology to library functions requires personnel trained in both fields. Administrative skills, familiarity with on-line searching of data bases, and media training were mentioned by at least two of the three library types. At a lower level specialty areas should be needed in academic and special libraries, e.g., law, medicine, etc. Public libraries echoed areas of need outlined by the BLS study [25], e.g., automation, outreach, management, and children's services. Least needed lists consistently included cataloging, technical services, acquisitions and circulation.

Although northeastern Ohio will remain the highest regional employer of librarians, there should be some slight shifting of employment opportunities. Table 8 shows these anticipated shifts. Libraries located in northeastern Ohio should employ fewer of Ohio professional librarians in 1990 than they did in 1979. This primarily stems from the low growth rates predicted by INFO/CAMLS libraries. Central Ohio libraries should employ more of the Ohio professionals by 1990, when compared to 1979. This shift results from anticipated expansion among CALICO libraries. Only academic shifts deviate from these patterns, perhaps due to the lower response rate for academic libraries.

As BLS predicted however, most job openings will stem from replacement needs rather than expansion. The regional breakdown in Table 8 accurately reflects the distribution of expected employment opportunities. Readers interested in projected distribution following the regional library systems are referred to Figure 2.

Table 8

Shifts in Geographical Location of
Professional PAS Librarians, 1979-1990

OHIO AREA*	Overall		Public		Academic		Special**	
	1979	1990	1979	1990	1979	1990	1979	1990
Northeast	48.2	45.3	55.1	49.9	34.5	35.5	61.1	54.4
Northwest	10.5	10.9	10.3	10.9	12.7	12.7	-	-
Central	17.9	19.9	14.6	18.6	21.1	19.9	32.7	36.0
Southwest	21.2	20.6	18.6	18.6	27.6	26.0	6.2	8.7
Southeast	2.2	3.3	1.4	2.0	4.1	5.9	0.0	0.9
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*Areas are defined by aggregating the following regions: 1) Northeast (INFO/CAMLS, MOLO, NOLA), 2) Northwest (NORWELD, WORLDS), 3) Central (CALICO, COIN), 4) Southwest (MILO, SWORL/GCLC), and 5) Southeast (OVAL, SOLO).

**Dashes indicate no special libraries were sampled from the region.

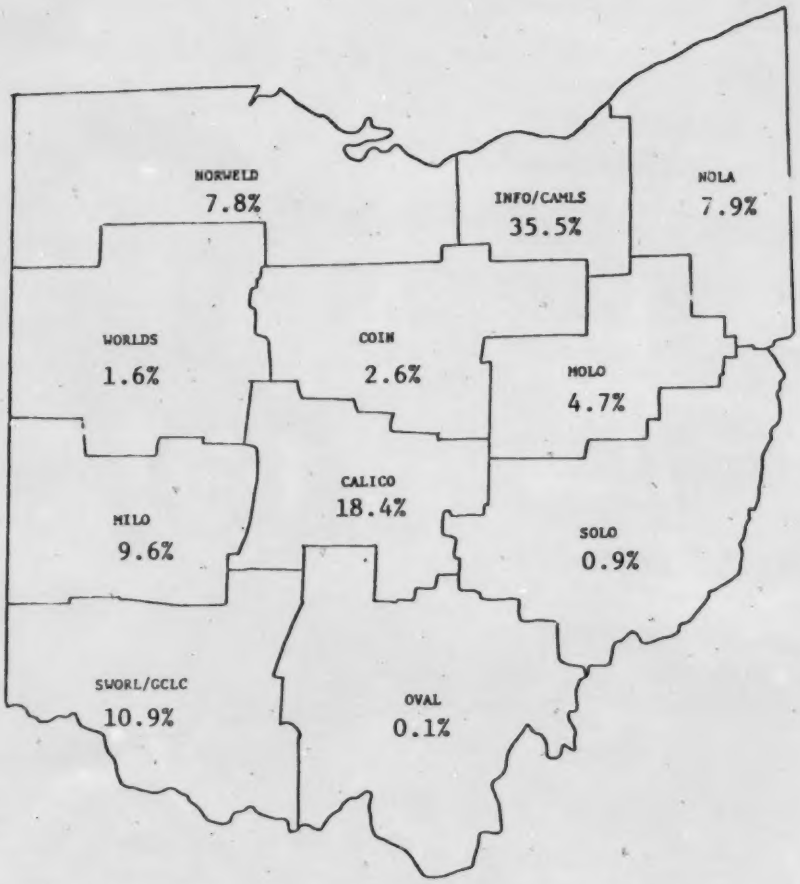

Figure 2

Projected Distribution of Professional
Employment Opportunities
in Public, Academic
and Special Libraries
1990

School Libraries

As Table 9 illustrates, school districts predicted a decline in the number of certificated positions filled from 1979 to 1982 with a reversing of this trend by the end of the decade. The average number of positions to be filled each year during the 1986-90 period however should not exceed 1979 levels. The declining trend is particularly evident at the junior and elementary school levels. The decrease in junior high positions should be due, in part, to the expanding middle school concept. Many survey respondents commented that declining enrollments and/or school closings would result in fewer certificated positions for the next five years.

Table 9 also indicates that while the total number of certificated positions may decline in the next ten years, that a growing number of the remaining positions will be filled by librarians with master's degrees in library science or educational media. This may be caused by the potential elimination of positions currently filled by non-master degreed personnel as well as the upgrading of personnel through continued professional development.

The median school district predicted all secondary level, certificated library personnel would have the MLS or M.Ed. degree by 1985. By 1981, 100 percent of the senior high personnel would have the specified degree, in the median responding school district. In contrast by 1990 the elementary certificated librarians would not be 100 percent master degreed, the median for the state being estimated at 88 percent.

Table 10 summarizes the number of certificated and certificated with master degreed positions that should be funded through 1990.

Table 9

Annual Growth Rates in School Library Staff
at Each Grade Level

LEVEL	GROWTH PERIODS 1976-1979*	1980-85	1986-90
Elementary			
Certificated		0.3%	- 0.2%
w/Master's		2.6%	6.7%
Middle School			
Certificated		5.4%	- 1.3%
w/Master's		10.0%	8.7%
Junior High			
Certificated		- 2.4%	1.1%
w/Master's		- 0.2%	2.8%
Senior High			
Certificated		0.1%	2.4%
w/Master's		3.7%	17.6%
TOTAL			
Certificated	16.8%	0.1%	0.7%
w/Master's	9.6%	2.2%	10.0%

*Total growth rates for 1976-79 are based on data reported in Table 20. [11] Grade level breakdowns were unavailable for the 1976-79 period.

Table 10

Grade Level Breakdown on
Number of Certificated Librarians and
Certificated Librarians with Master's Degree:
Adjusted and Unadjusted Estimates for 1985 and 1990

		Unadjusted*		Adjusted+	
LEVEL	1979	1985	1990	1985	1990
Elementary					
Certificated	638	611	610	614	613
w/Master	281	315	336	325	351
Middle School					
Certificated	55	75	77	77	77
w/Master	23	46	50	47	51
Junior High					
Certificated	207	176	178	171	173
w/Master	98	105	108	105	108
Senior High					
Certificated	332	333	341	333	343
w/Master	206	245	288	254	306
Total					
Certificated	1,232	1,195	1,206	1,195	1,206
w/Master	608	711	782	731	816

*These totals include the 1979 data on non-responding districts plus the predicted staff sizes of responding districts. Totals are therefore conservative estimates for sampled districts (50%).

+These totals include the 1979 data for non-responding libraries, adjusted by growth rates for each period, plus the predicted staff sizes of responding libraries. Totals may therefore be more liberal estimates for sampled districts (50%).

These figures should be doubled for total state estimates since the sampled districts employed approximately 50 percent of the certificated librarian population. By 1985 an estimated, 2,390 certificated librarians should be employed, by 1990, 2,412. Sixty-one percent of the total certificated population should have the specified master's degree by 1985; 68 percent, by 1990. Please note that the calculation of these percentages in no way implies that all school library positions require the MLS or M.Ed. degree as a minimum qualification.

Data in Table 11 show anticipated regional shifts in employment opportunities for school librarians. Northeastern Ohio should employ fewer certificated librarians with graduate degrees, and central Ohio, slightly more. Again most openings will be due to replacement needs and not expansion. Table 11 accurately reflects therefore anticipated employment opportunities: most openings in the Northeast but more growth in central and southwestern Ohio. Readers interested in further breakdown of employment opportunities are referred to Figure 3.

Supply and Demand

The primary objective of this study was to determine if and where alternative/additional graduate education programs in library and information science should be developed in Ohio. To meet this objective, projected personnel demand had to be compared to projected personnel supply. The graduate library science programs in Ohio which offer ALA approved degrees (i.e., Kent State University and Case

Table 11
Shifts in Geographical Location of
Certificated Librarians and Certificated
Librarians with Master's Degree, 1979-1990

OHIO AREA*	Certificated		With Master's	
	1979	1990	1979	1990
Northeast	42.5	39.4	52.7	48.1
Northwest	11.6	12.0	8.8	9.4
Central	20.4	22.0	17.9	21.0
Southwest	23.0	24.5	20.1	20.5
Southeast	2.5	2.1	0.5	1.0
	100.0%	100.0%	100.0%	100.0%

*Areas are defined by aggregating the following regions: 1) Northeast (INFO/CAMLS, MOLO, NOLA), 2) Northwest (NORWELD, WORLDS), 3) Central (CALICO, COIN), 4) Southwest (MILO, SWORL/GCLC), and 5) Southeast (OVAL, SOLO).

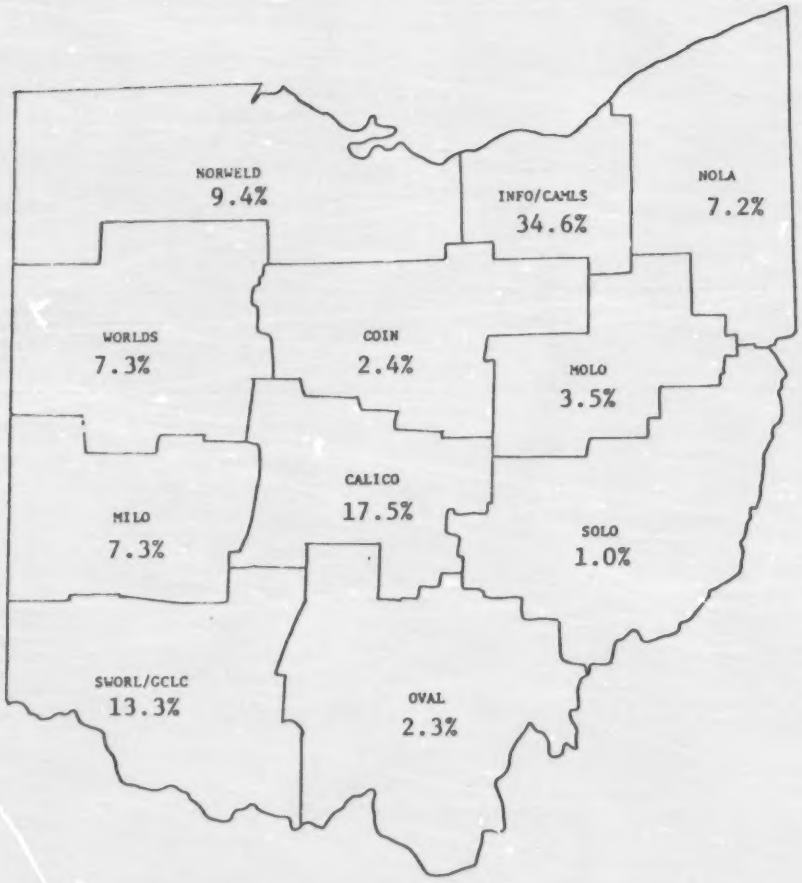

Figure 3

Projected Distribution of
Employment Opportunities
in Public School Libraries
for Librarians with Graduate
Education in Library Science or
Educational Media/Technology
1990

Western Reserve University) provided such projections through 1990. College of Education master's programs in educational media made similar projections.

1. MLS Programs

Table 12 reports the number of librarians graduating annually from Ohio graduate library science programs between 1976 and 1980, and projections on degrees awarded through 1990. As mentioned earlier in this report, the average number of annual graduates from ALA accredited library programs dropped from 102 in 1976 to 88 in 1979. Ohio programs also produced fewer graduates in each year during the 1976-80 period. In 1979, 223 MLS degrees were awarded; in 1980, 195 MLS degrees. The upsurge in 1979 graduates was the result of the graduation of the first group of part-time students from the KSU-SLS Columbus Extension Program.

Starting in 1982 Ohio programs expect the trend to be reversed. By 1982 it is anticipated that 205 MLS degrees will be awarded by Ohio programs. This should jump to 245 degrees by 1985. An annual average of 250 degrees is projected for the 1986-90 period. It should be noted that an increase is also projected in the annual number of specialist and doctoral degrees granted during the 1981-1990 period. How the recent endowment of $2-million to the CWRU School of Library Science (i.e., the Matthew A. Baxter School of Information and Library Science) will impact on the number of annual graduates is yet unknown [61].

Table 12

Number of Graduates
Anticipated from ALA-Accredited
Library and Information Science
Programs in Ohio, 1976-1990

	1976	1977	1978	1979	1980	
Master's	222	236	198	223	195	
Post Master's	9	9	10	4	10	
Total	231	245	208	227	205	
	1981	1982	1983	1984	1985	Annual Average 1986-90
Master's	195	205	215	230	245	250
Post Master's	9	10	11	12	14	14
Total	204	215	226	242	259	264

Before comparing these supply figures to projected demand, a closer look at 1976-79 placement trends seems warranted. Data on Case Western Reserve and Kent State placements were derived from annual placement surveys published each year in Library Journal and The Bowker Annual [21, 22, 23, 62, 63]. Since these surveys report the number of first professional degree graduates that have found positions each year, it was possible to calculate a rough placement rate for Ohio graduates. Table 13 presents this information. During the 1976-1979 period, approximately 65 to 70 percent of the Ohio, MLS graduates were able to secure employment by the time of the LJ survey. If one adjusts the total number of graduates using the entry rate of the BLS report [25], then roughly 85 percent of the graduates desiring employment were placed by the time of the survey.

Table 14 breaks down this placement by library type. Most of Ohio graduates found employment in public libraries. School libraries attracted the fewest number of graduates. The average percent distribution for the period 1976-1979 was public (34%), academic (22%), school (19%) and other library related agencies (25%). This distribution was utilized when analyzing supply and demand.

Finally geographical breakdowns were obtained on graduate placements. These data were supplied by Ohio ALA accredited programs. In 1979, 15 percent of all placements were out-of-state. Twenty-one percent of the graduates were unemployed, suggesting the adjusted placement rates in Table 13 may be slightly inflated. Of those graduates obtaining placements in Ohio, 73 percent located in northeastern Ohio, 19 percent in central Ohio, and 5 percent in

Table 13

Placement Rates for MLS Graduates of Ohio Programs*

Year	Percentage of Graduates Placed	
	Total	Adjusted**
1976	64%	79%
1977	70%	88%
1978	70%	87%
1979	67%	84%

*Placement rates are based on number of annual graduates securing employment by April or May of the following year (i.e. at the time of Learmont's survey).

**Adjusted percentages are ratios of total Ohio graduate placement to 80% of year's graduates. BLS [25] assumed 80% of new graduates would enter the field.

Table 14

Breakdown of Placements

by Library Type, 1976-1979

	1976	1977	1978	1979	Annual Average
Public	35	35	26	40	34
Academic	23	26	23	16	22
School	18	16	24	20	19
Other	24	25	27	24	25
	100%	100%	100%	100%	100%

southwestern Ohio. The remaining placements were shared by the southeastern and northwestern regions. The central Ohio placements are probably due to the large number of students graduating from the KSU-SLS Columbus Extension Program that year.

2. Public, Academic, and Special Libraries

Table 15 presents projected personnel supply and demand for public, academic, and special libraries for 1985 and the period 1986-90. Demand has been reported for the sampled libraries - approximately 80 percent of Ohio professionals employed in public, academic, and special libraries - and adjusted for the total population. In 1985 between 140 and 175 professional positions may be available (See [11] for calculations). The range of openings for the 1986-90 period is 160 to 200, back to 1979 levels. Supply data have been provided for the same years. Absolute supply represents the total number of MLS degrees awarded. The PAS figures (i.e., for public, academic, and special libraries) adjust the absolute total using the average placement rates by library type given in Table 14. Finally actual entry figures have further adjusted PAS data, assuming an 80 percent entry rate suggested by the BLS report. No adjustments were made for out-of-state placement since it may be assumed that graduates of other programs may correspondingly seek Ohio placements, e.g., Michigan and Kentucky.

When absolute supply data are compared to predicted demand, a situation of oversupply exists for both 1985 and 1990. In 1985, 70 graduates may be unable to secure employment in Ohio; in 1990, 50.

Table 15

Supply and Demand for
PAS Positions

YEAR	DEMAND			SUPPLY	
	Sample	Population	Absolute	PAS	Actual Entry
1979	160	200	225	183	146
1985	140	175	245	198	158
1990	160	200	250	203	162

Definitions

Sample: Number of positions predicted by sampled libraries.

Population: Sample predictions adjusted to reflect .8:1 sample/population ratio.

Absolute: Total number of MLS degrees granted.

PAS: Total number of MLS graduates available for PAS libraries.

Actual Entry: PAS figures adjusted by the BLS entry rate of 80%.

The PAS supply data suggest a less dismal employment situation. By 1985, roughly 20 MLS graduates may have difficulty locating positions, while approximately 3 graduates in the 1986-90 period may have problems locating Ohio employment. Finally when PAS supply is adjusted for entry rate, actual entry figures suggest that a surplus of professional jobs might exist; 17 in 1985, and 38 annually in the 1986-90 period.

When considering these data, the reader should recall that libraries not included in the sample usually have fewer professionals on staff and/or offer less competitive salaries. Placement patterns of the past indicated that graduates gravitated towards large metropolitan areas - i.e., Cleveland, Columbus, and Cincinnati. It is likely therefore that the additional openings offered by population demand figures may not attract new graduates, especially those with pre-professional library experience. In addition, it should be remembered that transfers and re-entrants have not been included in the supply figures. Also if 80 percent is the entry rate, then every year 20 percent of the graduates are added to a pool of potential supply. Translated into actual numbers, this means that between 1981 and 1985, a pool of roughly 175 delayed entrants would be created to compete with new degrees, re-entrants and transfers during the 1986-90 period.

3. School Libraries

Table 16 reports the projected number of master's degrees to be awarded by media programs in Ohio. These were conservative predictions since not all the programs furnished estimates. The media programs

Table 16

Estimated Number of Master's Degrees
to be Awarded by Ohio Media Programs, 1981-1990

1981	1982	1983	1984	1985	Annual Average for 1986-90
82	104	112	120	132	143

predicted an increase of over 50 percent in the number of master degrees awarded, expanding from 82 degrees in 1981 to 143 by 1986-90.

The number of graduates from ALA programs likely to enter the school library field was estimated from data reported in Table 15. Specifically supply was defined as the difference between absolute and PAS figures.

Table 17 combines both sources of supply data and compares them to predicted demand. Sample demand represents sampled libraries employing 50 percent of the total population. Population figures were adjusted proportionately. The reader should note that demand figures were based on the number of master degreed personnel that districts anticipated they would be able to hire.

A comparison of projected supply and demand indicated that a surplus of school librarians should exist through 1990. This is true for both absolute and BLS entry figures. For example, with BLS entry figures, a surplus of 66 occurred in 1979; 79, in 1985, and 16, in 1986-90.

Table 17 also has estimated supply assuming that 20 percent of the graduates were employed in school libraries while pursuing their degrees and would remain in that position after graduation. (See [11] for rationale). Even with these additional adjustments the job market would continue to be a buyer's market through 1985. By 1986-90, the balance would shift slightly. Each year however the pool of delayed entrants would expand. The delayed entrance of 1981-85 graduates could produce 150 librarians to compete with new graduates, re-entrants, and transfers by 1986.

Table 17

Supply and Demand for
School Library Positions
at the MLS/M-Ed Level

YEAR	DEMAND	
	Sample	Population
1979	16	32
1985	32	64
1990	68	136

	SUPPLY	
	Absolute	BLS 80% Entry Rate
1979	123	98
1985	179	143
1990	190	152

	POSITIONS NEEDED ASSUMING 20% OF GRADUATES ALREADY EMPLOYED
1979	78
1985	114
1990	121

The employment outlook for certificated school librarians remains uncertain. School districts, faced with declining enrollments, project school closings and reduction of library staff. Minimum standards, as currently drafted, call for additional certificated personnel. The job market should continue to be competitive for all librarians through 1985 but may begin to ease toward the end of the decade. The largest percentage of openings should result from replacement needs in northeastern and central Ohio. Any expansion that does occur should be centered in southwestern and central Ohio.

Enrollment Projections

Library Associates and Certificated Librarians

Library associates (i.e., support staff, excluding technical, clerical, plant, and maintenance staff, who hold a BA as the highest degree) employed in the three library types and certificated, non-master degreed librarians employed in public school libraries were surveyed to determine their interest in pursuing a graduate degree in a library-related field. Table 18 indicates roughly one-fifth of each group definitely planned to pursue a degree while roughly one-third of each group had no plans for future education in library-related field. Twelve percent of the public library associates had degrees in progress; 6 percent, in the remaining three groups. Over 50 percent of public, special, and school respondents were considering a library-related degree.

Table 18

Educational Plans*

Descriptor	Public		Academic		Special		School	
1. Plan to work on graduate degree in library science, educational media, CIS?								
Yes	21%		24%		18%		23%	
Undecided	38%		23%		41%		32%	
No	29%		47%		35%		39%	
Degree in progress	12%		6%		6%		6%	
2. If yes or undecided								
a. Field to be selected	A	B	A	B	A	B	A	B
Library/information science	71%	78%	89%	86%	100%	88%	44%	44%
Educational media or instructional technology	18%	17%	0%	6%	0%	0%	42%	45%
Computer/information science	6%	2%	0%	8%	0%	12%	12%	9%
Undecided	5%	3%	11%	0%	0%	0%	2%	2%

Table 18, continued

Descriptor	Public		Academic		Special		School	
b. Work while studying:	A	B	A	B	A	B	A	B
Yes, full-time	71%	61%	53%	58%	67%	88%	88%	91%
Yes, part-time	29%	39%	37%	33%	33%	12%	7%	4%
No	0%	0%	11%	9%	0%	0%	2%	2%
Undecided	0%	0%	0%	0%	0%	0%	3%	3%
c. Attend Ohio institution:								
Yes	88%	95%	74%	77%	100%	100%	92%	92%
d. Age								
18-24	12%	7%	11%	5%	33%	20%	12%	6%
25-29	41%	31%	47%	43%	0%	10%	21%	17%
30-39	23%	26%	21%	35%	67%	40%	30%	38%
40-49	12%	17%	16%	11%	0%	10%	21%	18%
50-59	12%	17%	5%	6%	0%	10%	14%	20%
60+	0%	2%	0%	0%	0%	10%	2%	1%
e. Employment desired:								
Academic	7%	3%	78%	77%	0%	0%	5%	5%
Public	73%	80%	11%	13%	0%	0%	8%	4%
Special	7%	3%	11%	10%	67%	90%	8%	4%
School	0%	3%	0%	0%	33%	10%	71%	82%
Other	0%	3%	0%	0%	0%	0%	8%	5%
Undecided	13%	8%	0%	0%	0%	0%	0%	0%

Table 18, continued

Descriptor	Public		Academic		Special		School	
f. Year commenced	A	B	A	B	A	B	A	B
1980	6%	3%	16%	8%	0%	0%	15%	8%
1981	56%	43%	53%	40%	33%	37%	38%	37%
1982	13%	32%	16%	17%	33%	37%	27%	25%
1983	6%	5%	11%	11%	34%	13%	27%	25%
1984	0%	0%	0%	0%	0%	0%	7%	1%
1985	0%	0%	0%	3%	0%	0%	3%	0%
After 1985	13%	8%	0%	17%	0%	13%	3%	11%
Undecided	6%	8%	5%	3%	0%	0%	7%	10%

*Column A includes individuals responding "yes" to question C2 on educational plans. Column B includes individuals responding "yes" or "undecided" to item C2 on the questionnaire.

According to Table 18, the majority of library associates wish to pursue a graduate degree in library and information science. Eighteen percent of the public library associates wished, however, to pursue a media degree. School librarians with definite plans were divided between library and information science programs (44%) and educational media programs (42%).

The majority of individuals contemplating a degree expect to enroll in the next two years. Over 90 percent of each group surveyed would continue to work, most on a full-time basis. Public, special, and school library respondents anticipate attending an Ohio academic institution for this degree (i.e., 90% or more); however approximately 25 percent of the academic library associates would attend out-of-state programs. While over 50 percent of each group fell into the 25 to 39 years of age category, at least 20 percent of those contemplating a library-related degree fell into the 40 to 59 age category. The majority of individuals contemplating a degree would continue careers in the same type of library in which currently employed. Career shifts would occur for a small percentage.

Because potential students varied in their anticipated field of study, degree program breakdowns were obtained. Table 19 reports these data separately for library associates and school librarians. Only in central Ohio did a sizeable percentage of library associates definitely plan to pursue a degree other than library and information science; 30 percent of central Ohio associates planned studies in the educational media field. Over 50 percent of the school

Table 19

Graduate Programs to Be Pursued by Potential Student Populations for the Period 1981-1985+

Region	Public, Academic, and Special Library Associates				Public School Librarians			
	A	(%)	B	(%)	A	(%)	B	(%)
Northwest								
Library/Info. Science	18	(100)	32	(100)	25	(57)	51	(50)
Educational Media	0	(0)	0	(0)	19	(43)	44	(44)
Computer/Info. Science	0	(0)	0	(0)	0	(0)	6	(6)
Northeast								
Library/Info. Science	41	(85)	127	(95)	28	(36)	63	(32)
Educational Media	0	(0)	0	(0)	35	(46)	97	(50)
Computer/Info. Science	7	(15)	7	(5)	14	(18)	35	(18)
Central								
Library/Info. Science	44	(70)	88	(73)	39	(54)	85	(50)
Educational Media	19	(30)	26	(21)	26	(36)	78	(46)
Computer/Info. Science	0	(0)	7	(6)	7	(10)	7	(4)
Southeast								
Library/Info. Science	1	(100)	4	(40)	0	(0)	33	(46)
Educational Media	0	(0)	6	(60)	13	(100)	34	(48)
Computer/Info. Science	0	(0)	0	(0)	0	(0)	0	(0)
Southwest								
Library/Info. Science	27	(84)	67	(68)	34	(42)	61	(47)
Educational Media	0	(0)	23	(23)	27	(33)	48	(37)
Computer/Info. Science	5	(16)	9	(9)	13	(16)	13	(10)

Note: Percentages represent proportion of A and B respondents that selected each field. Percentages may not total to 100 for each region due to "undecided" responses.

librarians in northwestern and central Ohio plan to obtain a graduate degree in library and information science. Individuals selecting computer and information science were located primarily in the northeastern and southwestern regions and came from both the library associate and certificated, non-master degreed school librarian populations.

Table 20 aggregates the data reported in Table 19 across all four groups. Northeastern estimates were conservative since several large academic and public libraries did not distribute the questionnaires to their library associate staffs. Data indicated that central Ohio had the largest number of students committed to degrees in library and information science. This was true for both library and information science and educational media programs. Northeastern and central Ohio were approximately equal in the number of individuals contemplating a graduate degree in any of the three areas. Northeastern and southwestern libraries employed most individuals interested in computer and information science degrees.

The reader should remember that data in Table 20 reflects potential enrollment from the four populations only. Obviously more students are interested in media and computer and information science programs. Also these data indicate number of potential students, not the number of students who have applied to a program nor the number who would meet admission criteria if in fact they did apply.

Table 20

Potential Student Population by Degree Area for the Period 1980-1985+

Region	Library/ Information Science		Educational Media		Computer/ Information Science	
	A	B	A	B	A	B
Northwest	43	83	19	44	0	6
Northeast	69	190	35	97	21	42
Central	83	173	45	104	7	14
Southeast	1	37	13	40	0	0
Southwest	61	128	27	71	18	22

Note: Regional totals do not consistently equal those reported in previous tables since some respondents had not decided on a degree program.

1. Commuting and Residency Requirements

Most respondents (100%) planning to pursue degrees would commute one hour to attend an ALA accredited degree program with the following exceptions: northeastern school librarians (92%), central academic library associates (80%), southwestern public library associates (50%) and school librarians (82%). When those with definite plans were combined with those still unsure about their educational future, the percent willing to commute dropped (See [12] for specific percentages). Only in northwestern Ohio did percentages remain high, perhaps due to the commutable distance to ALA degree programs in Michigan.

A full term of residency on the main campus would reduce the number of potential students. Except in northwestern Ohio, no more than 50 percent of those planning degrees would be willing to meet such a requirement. Table 21 contains region by library breakdowns.

This suggests that potential students desire programs similar to the Columbus Extension Program, i.e., those offering degrees that may be obtained without attending the main campus. Students would accept up to an hour of commuting for ALA degrees but indicated far less interest in meeting full term residency requirements.

2. Potential Sites for Off Campus Programs

The survey requested information on the state supported campuses located within one hour's drive and the institution closest to work or home. Table 22 summarizes the responses for those with more

Table 21

Regional Willingness to Meet a
Full-time Residency Requirement of One Term
at a Main Campus

	Library Type							
	Public		Academic		Special		School	
Region	A	B	A	B	A	B	A	B
Northwest								
Yes	0%	0%	83%	75%	-	0%	71%	43%
Undecided	100%	100%	17%	25%	-	100%	14%	34%
No	0%	0%	0%	0%	-	0%	15%	23%
Northeast								
Yes	50%	23%	50%	20%	33%	33%	50%	24%
Undecided	0%	31%	0%	20%	34%	34%	20%	32%
No	50%	46%	50%	60%	33%	33%	30%	44%
Central								
Yes	33%	36%	50%	22%	-	0%	36%	25%
Undecided	44%	43%	25%	56%	-	100%	45%	43%
No	22%	21%	25%	22%	-	0%	19%	32%
Southeast								
Yes	0%	20%	-	0%	-	-	0%	10%
Undecided	100%	60%	-	33%	-	-	100%	60%
No	0%	20%	-	67%	-	-	0%	30%
Southwest								
Yes	50%	30%	50%	45%	-	100%	36%	33%
Undecided	0%	30%	17%	37%	-	0%	45%	39%
No	50%	40%	33%	18%	-	0%	19%	28%

Table 22

Potential Sites for Off-Campus Programs

Region	Library Associates		School Librarians	
	Within One Hour	Closest	Within One Hour	Closest
Northwest				
Bowling Green State University	88%	43%	86%	38%
University of Toledo	56%	28%	79%	50%
Northeast				
Cleveland State University	54%	42%	20%	12%
Kent State University	58%	20%	56%	16%
Youngstown State University	14%		32%	24%
Central				
Ohio State University	81%	74%	64%	53%
Southeast				
Ohio University	50%	30%	40%	30%
Southwest				
Wright State University	59%	46%	44%	28%
Miami University	57%	16%	61%	28%
University of Cincinnati	41%	6%	56%	22%

definite educational plans. It appears that Bowling Green State University, Kent State University, Ohio State University, Ohio University, and Wright State University provide convenient program sites for commuting students in the respective Ohio regions.

Student Library Assistants and Undergraduate Students Enrolled in Media Courses

As stated in the introduction, questionnaires were sent to a sample of student library assistants employed in Ohio academic libraries and distributed to students enrolled in media courses in Ohio Colleges of Education. Since findings of this study confirm most trends observed in the preceding study, only general results are presented here. The full reports appear in a related paper [12].

Between 11 and 19 percent of the student assistants currently employed in Ohio academic libraries were contemplating library careers. Although less than half of the interested students were earning undergraduate degrees in a library-related field, over 77 percent would seek a graduate degree in either library science (61%), educational media (6%), or computer and information science (11%). Most students interested in library science degrees were located in northeastern and central Ohio and most of these would remain in the state for their degrees.

Tentative conclusions drawn from the survey of education students are as follows:

1. Students remaining in the state for their graduate degrees prefer to attend an institution in their area.

2. Most media program graduates are seeking school library positions.

3. The preferred field for those planning further study is library science.

4. The listing of Kent State University as the site for this additional study by students in northwestern, northeastern, and central Ohio suggests that the ALA degree is preferred.

5. Residents of northeastern and central Ohio display the most interest in library-related degrees.

The implications for all needs assessment studies are summarized in Chapter V of this report.

CHAPTER IV

RESOURCE EVALUATION

To determine which geographical areas in Ohio have adequate library collections to support graduate education and/or continuing education programs in librarianship, The Graduate Education for Librarianship in Ohio Project performed a preliminary evaluation of library collections in the field of library and information science using the OCLC database. This report stresses the preliminary nature of this evaluation for two reasons. First not all Ohio libraries participate in the OCLC system. Second not all professional collection materials are cataloged and/or entered into the OCLC database; therefore search results reflect minimum holdings.

The resource evaluation focused on adequacy of periodical collections and adequacy of the general library collection in supporting selected KSU-SLS core courses and electives. In the periodical collection evaluation, institutional holdings were identified for 211 titles indexed in Library Literature during 1980. Twenty-three major collections, identified through the OCLC search, were sent draft copies of the search report and asked to verify findings [14] and to provide specific holding information [15]. Table 23 arranges the twenty-three collections by region. The OCLC symbols listed in Table 23 have been used throughout this chapter to label institutional holdings.

Table 23

OCLC Symbols for Twenty-Three
Major Collections*

Region	Symbol	Institution
Northeast	AKR	University of Akron
	CLE	Cleveland Public Library
	CSU	Cleveland State University
	CWR	Case Western Reserve University
	OBE	Oberlin College
	KSU	Kent State University
	YMM	Youngstown and Mahoning County Public Library
	YNG	Youngstown State University
Northwest	BGU	Bowling Green State University
	TOL	University of Toledo
Central	OCC	OCLC Library
	OCO	Public Library of Columbus and Franklin County
	OHI	The State Library of Ohio
	OHT	Ohio Historical Society
	OSU	Ohio State University
	OUL	Ohio University, Lancaster
	KEN	Kenyon College
Southeast	OUN	Ohio University
Southwest	CDC	Cedarville College
	WSU	Wright State University
	CIN	University of Cincinnati
	MXC	University of Cincinnati Medical Center
	ORW	University of Cincinnati, R. Walters General & Technical College

*Major collections were defined as those having ten or more of the 211 periodical titles searched.

Table 24 provides data on the comprehensiveness of institutional collections in each region. Even the universities maintaining collections to support ALA accredited degree programs do not hold 100 percent of the titles indexed nor 100 percent of basic U.S., Canadian or non-North American titles (for basic title listings and definitions, see [14, pp.2, 12-29]). Kent State University held 75 percent of all titles, 87 percent of basic U.S. and Canadian titles, and 85 percent of basic foreign titles. Case Western Reserve University held 81 percent of all titles indexed in Library Literature, 94 percent of basic U.S. and Canadian titles, and 95 percent of basic foreign titles.

Data in Table 24 suggest that the following institutions would have the best resources to support off-campus coursework and research in the library field in Ohio: 1) Cleveland Public Library in the Northeast, 2) University of Toledo in the Northwest, 3) Ohio State University and The State Library of Ohio in central Ohio, and 4) Wright State University in the Southwest. All of these institutions hold at least 61 percent of the basic U.S. and Canadian titles (i.e., 70 percent of the size of the Kent State University collection).

Table 25 presents data on the availability of titles by region. Three areas collectively hold over 90 percent of the general U.S. and Canadian titles: CALICO in central Ohio and INFO/CAMLS and NOLA in northeastern Ohio. This means that students needing core periodicals in the field of library and information science would be able to find the majority of them in Cleveland, Columbus, or Kent area libraries. The best collections of professional periodicals for librarians' continuing education and professional development are

Table 24

Percentage of Periodicals
Held by Major Collections

Region	Library	Titles* All (N = 211)	Titles* General (N = 62)	Titles* Foreign (N = 20)
Northeast	AKR	24%	39%	5%
	CLE	54%	76%	70%
	CSU	26%	47%	20%
	OBE	18%	29%	15%
	CWR	81%	94%	95%
	KSU	75%	87%	85%
	YMM	19%	37%	0%
	YNG	18%	34%	10%
Northwest	BGU	32%	52%	40%
	TOL	41%	66%	50%
Central	OCC	27%	50%	35%
	OCO	20%	40%	5%
	OHI	39%	73%	30%
	OHT	13%	27%	0%
	OSU	55%	76%	65%
	OUL	13%	31%	0%
	KEN	9%	18%	0%
Southeast	OUN	31%	50%	20%
Southwest	CDC	12%	29%	0%
	WSU	37%	61%	50%
	CIN	31%	48%	85%
	MXC	10%	23%	0%
	ORW	11%	26%	0%

*See [14] for periodical titles included in the general and foreign categories.

Table 25

Availability of Titles by Region*

Region	Percentage of Titles Held	
	General (N = 62)	Foreign (N = 20)
CALICO	90%	75%
COIN	18%	0%
INFO/CAMLS	97%	100%
MILO	66%	60%
MOLO	0%	0%
NOLA	94%	90%
NORWELD	79%	55%
OVAL	48%	20%
SOLO	2%	0%
SWORL/GCLC	53%	35%
WORLDS	0%	0%

*See [14] for periodical titles included in the general and foreign categories.

therefore located in northeastern and central Ohio.

The next best area appears to be the Northwest. Seventy-nine percent of the general titles are held by either Bowling Green State University or University of Toledo. Recall, however, that University of Toledo held 66 percent while Bowling Green held 52 percent. It would seem both collections would need to be used, for example, when completing course assignments.

Collections and Coursework

In addition to examining periodical collections, the resource evaluation phase assessed how well each of the major collections could support specific coursework. The reading lists of selected core courses and electives were obtained from the School of Library Science at Kent State University. Non-periodical titles from the library and information science field were searched using the OCLC system. Only the holding information for the twenty-two major collections was recorded (since the CWRU School of Library Science Library does not participate in OCLC, no information was available). Again the reader is cautioned that findings reflect minimum collections for specific institutions. Also information on number of copies per title is not given. Obviously Kent State has 100 percent of the materials on the assigned or recommended reading lists but not all items were picked up in the search.

Table 26 shows the percentage of 42 basic sources for library course projects held by individual institutions. The basic source list is distributed to all new KSU-SLS students. Only The State

Table 26

Percentage of 42 Basic Sources Held
for Library Science Projects*

Region	Library	Percentage
Northeast	AKR	45%
	CLE	55%
	CSU	29%
	OBE	26%
	KSU	79%
	YMM	29%
	YNG	26%
Northwest	BGU	62%
	TOL	55%
Central	OCC	40%
	OCO	43%
	OHI	74%
	OHT	2%
	OSU	83%
	OUL	31%
	KEN	12%
Southeast	OUN	40%
Southwest	CDC	5%
	WSU	33%
	CIN	21%
	MXC	12%
	ORW	5%

*Periodical titles were excluded from the basic list.

Library of Ohio and Ohio State University have basic source collections comparable to that of Kent State. It should be noted that data for these two central Ohio libraries accurately reflects holdings since both the Library Control System of Ohio State University and the OCLC system were searched.

Table 27 presents similar data for five core courses: 1) Foundations of librarianship (60600), 2) Organization of library materials (60602), 3) Introduction to library science research methods (60604), 4) Library management (60610), and 5) Library automation (60640). The reading lists of the reference and acquisition courses were not searched due to their length and/or their inclusion of works from all subject areas. Table 27 suggests that the cataloging and classification course (60602) is the least adequately supported of the five core courses. For example Ohio State University holds between 88 and 90 percent of most core course readings but only 81 percent of cataloging materials. A similar pattern characterizes Cleveland Public Library holdings.

Overall it seems that Cleveland Public Library could adequately support automation, management, research, and to a lesser degree, foundations coursework. In the Northwest, Bowling Green and University of Toledo seemed best equipped for research and management courses. In central Ohio, Ohio State University could support all core courses, but would be least effective for the cataloging courses. In the past the Kent State library science faculty has had to ship materials to Columbus to support the cataloging course. The Public Library of Columbus and Franklin County has a major portion of the

Table 27

Percentage of Reading List Titles
Held by Major Collecting Libraries
in Ohio: Core Courses*

Region	Library	Core Courses				
		60600	60602	60604	60610	60640
Northeast	AKR	42%	31%	58%	50%	44%
	CLE	81%	72%	84%	88%	89%
	CSU	42%	34%	58%	50%	67%
	OBE	35%	31%	16%	38%	33%
	KSU	87%	81%	94%	100%	89%
	YMM	35%	41%	26%	38%	22%
	YNG	29%	13%	45%	25%	33%
Northwest	BGU	65%	63%	87%	88%	67%
	TOL	65%	69%	87%	88%	78%
Central	OCC	26%	66%	19%	63%	100%
	OCO	71%	59%	74%	63%	56%
	OHI	81%	68%	68%	88%	67%
	OHT	3%	3%	0%	0%	0%
	OSU	90%	81%	90%	88%	89%
	OUL	45%	56%	39%	88%	22%
	KEN	3%	16%	3%	13%	0%
Southeast	OUN	48%	41%	52%	75%	22%
Southwest	CDC	3%	6%	3%	0%	0%
	WSU	52%	56%	68%	75%	56%
	CIN	23%	50%	32%	38%	44%
	MXC	6%	19%	6%	13%	33%
	ORW	3%	9%	3%	0%	0%
Number of titles		31	32	31	8	9

*General works from other subject fields were excluded from the searches. Articles in periodicals were also excluded.

readings for the foundations and research courses; fewer for cataloging and automation. The State Library of Ohio collection seems strongest for foundations and management. Finally in the Southwest, Wright State University might support a research or a management course.

Titles on reading lists of nine elective courses were also searched. These courses cover the organization and administration of libraries: 1) Newspaper and mass media libraries (50583), 2) The school library (60607), 3) The public library (60608), 4) The academic library (60615), 5) The special library (60616), 6) The art library (60624), 7) The music library (60625), 8) Library services to ethic communities (60634), and 9) Library buildings and equipment (60660).

According to data in Table 28, the Cleveland Public Library would provide its best support for the public library course, the building course, and the ethnic community service course. The special library course might be supported by the Cleveland Public Library as well.

Both northwestern libraries could obviously support the school library course since similar courses are part of their curricula. The academic library course might be supported, but to a lesser degree.

In central Ohio, the public library course would be adequately served by The State Library of Ohio and the Public Library of Columbus and Franklin County collections. The Ohio State University collection would contain most titles for the school library, academic library and art library courses. It should be noted that academic library materials have also been shipped to the Columbus program even though 90 percent of the titles are available in the collection.

Table 28

Percentage of Reading List Titles Held by Major Collecting Libraries in Ohio: Courses on Organization and Administration of Libraries*

Region	Library	Courses				
		50583	60607	60608	60615	60616
Northeast	AKR	43%	64%	30%	57%	11%
	CLE	64%	64%	88%	59%	78%
	CSU	29%	27%	18%	46%	22%
	OBE	7%	18%	6%	44%	0%
	KSU	86%	64%	97%	90%	100%
	YMM	14%	27%	33%	18%	11%
	YNG	7%	45%	15%	29%	33%
Northwest	BGU	57%	91%	73%	79%	78%
	TOL	57%	82%	67%	84%	78%
Central	OCC	29%	9%	21%	37%	44%
	OCO	50%	55%	79%	57%	56%
	OHI	50%	64%	94%	84%	67%
	OHT	0%	0%	0%	0%	0%
	OSU	64%	91%	67%	90%	67%
	OUL	7%	64%	70%	49%	33%
	KEN	0%	9%	3%	16%	11%
Southeast	OUN	36%	55%	39%	56%	22%
Southwest	CDC	7%	27%	9%	21%	0%
	WSU	36%	64%	78%	76%	33%
	CIN	36%	36%	6%	65%	44%
	MXC	0%	9%	0%	12%	33%
	ORW	14%	0%	6%	12%	0%
Number of titles		14	11	33	68	9

Table 28, continued

Region	Library	Courses 60624	60625	60634	60660
Northeast	AKR	51%	50%	75%	0%
	CLE	67%	50%	100%	100%
	CSU	35%	75%	75%	100%
	OBE	35%	25%	50%	0%
	KSU	70%	75%	100%	100%
	YMM	30%	25%	50%	0%
	YNG	30%	50%	75%	100%
Northwest	BGU	67%	75%	75%	100%
	TOL	63%	100%	75%	100%
Central	OCC	10%	25%	0%	0%
	OCO	59%	100%	50%	100%
	OHI	61%	50%	75%	100%
	OHT	1%	0%	0%	0%
	OSU	85%	100%	75%	100%
	OUL	34%	50%	0%	100%
	KEN	16%	0%	0%	0%
Southeast	OUN	44%	50%	50%	0%
Southwest	CDC	11%	25%	0%	0%
	WSU	66%	100%	50%	100%
	CIN	41%	25%	25%	100%
	MXC	3%	0%	25%	0%
	ORW	1%	25%	0%	0%
Number of Titles		79	4	4	1

*General works from other subject fields were excluded from the searches. Articles in periodicals were also excluded.

This insures availability of multiple copies. None of the central Ohio libraries have extensive materials on special libraries, according to this limited search.

In the Southwest, Wright State University might serve student needs in the public and academic library courses. No Ohio libraries had strong newspaper library collections. The music library, library buildings, and ethnic services courses have too few titles to judge the adequacy of collections beyond what has been stated above.

Finally Table 29 presents "holding" data for course readings dealing with the history and philosophy of librarianship. Titles for four courses were searched: 1) Book arts (60609), 2) Historical foundations of libraries and reading matter in the western world (60631), 3) European librarianship (60645), and 4) Library service at the state level (60651).

In the Northeast, historical foundations might partially be supported by Cleveland Public Library. Some European librarianship materials would be available at both of the northwestern universities. Central Ohio might support the European librarianship and book arts courses through the Ohio State University. None of the regional collections seems adequate to support these courses without materials from the Kent campus.

In summary, the best support for off-campus core courses is provided by central Ohio libraries, followed by the Cleveland Public Library. Both areas need materials from Kent for the cataloging course. Regarding the electives, data suggested that Cleveland Public has an adequate collection for public library, ethnic services,

Table 29

Percentage of Reading List Titles Held by Major Collecting Libraries in Ohio: Courses on the History and Philosophy of Libraries and Librarianship*

		Courses			
Region	Library	60609	60631	60645	60651
Northeast	AKR	25%	31%	0%	25%
	CLE	75%	77%	67%	50%
	CSU	75%	31%	17%	25%
	OBE	0%	15%	17%	0%
	KSU	50%	85%	83%	88%
	YMM	25%	23%	33%	38%
	YNG	25%	15%	17%	13%
Northwest	BGU	50%	69%	83%	25%
	TOL	75%	46%	83%	25%
Central	OCC	0%	15%	0%	13%
	OCO	50%	69%	67%	13%
	OHI	25%	62%	50%	63%
	OHT	0%	0%	0%	0%
	OSU	100%	77%	83%	75%
	OUL	25%	15%	0%	13%
	KEN	0%	0%	0%	0%
Southeast	OUN	50%	31%	0%	13%
Southwest	CDC	25%	8%	0%	0%
	WSU	75%	54%	17%	25%
	CIN	25%	8%	0%	13%
	MXC	0%	0%	0%	0%
	ORW	0%	0%	0%	0%
Number of Titles		4	13	6	8

*General works from other subject fields were excluded from the title searches. Articles in periodicals were also excluded.

and library building courses. Central Ohio libraries jointly support the public, academic, and school library courses but provide more limited coverage of special library materials. Most other electives would benefit from shipments from the main campus. European librarianship and book arts appeal to be marginally served by central and northeastern Ohio libraries.

Periodical Collections at Potential Off-Campus Sites

All preceding study findings point to northeastern, southwestern and central Ohio as areas best able to support expanding graduate library education opportunities. The periodical collection analysis was used to examine weaknesses, strengths and possible duplication of collections of institutions in central Ohio. The interested reader can do a similar analysis for northeastern and southwestern Ohio using data in the collection evaluation report [14-15].

Periodical collections at The Ohio State University and the State Library of Ohio were compared. Table 30 lists those English language titles for which both libraries maintain current subscriptions. Asterisks in the list mark titles not currently subscribed to by the Kent State University School of Library Science Library. As Table 30 demonstrates, most titles needed to support coursework in library science are currently held by both libraries. Most of the duplicated titles are ones essential for continuing professional development of library personnel or are relevant to the library's service mission.

A comparison of Tables 31 and 32 demonstrates the complementary nature of the two collections. The Ohio State University Libraries

Table 30

Titles Currently Subscribed
to by Both The Ohio State
University Libraries and The
State Library of Ohio

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1. AB Bookman's Weekly ($35)
2. American Archivist ($25)
3. American Libraries ($25)
4. ALA Washington Newsletter ($8)
5. JASIS ($50)
6. Booklist ($32)
*7. Bookmark ($1.50)
8. Canadian Library Journal ($15)
9. Choice ($40)
*10. Collection Management
11. College and Research Libraries ($25)
12. College and Research Libraries News ($5)
13. Drexel Library Quarterly ($12)
14. Government Publications Review ($121)
15. Horn Book Magazine ($18)
16. Illinois Libraries (?)
17. International Cataloging ($15)
18. International Library Review ($90.50)
19. Journal of Academic Librarianship ($30)
20. Journal of Library Automation ($15)
21. Journal of Library History and Comparative Librarianship ($20)
22. Kentucky Library Association Bulletin ($12)
23. Library Acquisitions ($30)
24. Library Association Record (?)
25. Library Journal ($27)
26. Library Occurrent (F)
27. L.C. Information Bulletin (F)
28. Library Quarterly ($20)
29. Library Resources and Technical Services ($15)
30. Library Scene ($8)
31. Library Technology Reports ($125)
32. Library Trends ($16)
33. Michigan Librarian ($10)
*34. Microform Review ($40)
35. Minnesota Libraries (?)
36. Music Library Association Notes ($18)
37. Newsletter on Intellectual Freedom ($10)
38. Ohio Library Association Bulletin (F)
39. Ohio Media Spectrum (F)
40. Online ($52)
41. Public Library Trustee (F)

42. Publisher's Weekly ($38)
43. RQ ($20)
44. Reference Services Review ($25)
45. School Library Journal ($20)
46. School Media Quarterly ($15)
47. Serials Librarian ($30)
48. Serials Review ($25)
49. Special Libraries ($26)
50. Top of the News ($15)
51. Unesco Journal of Information Science, Librarianship and Archives Administration (Fr. 40)
52. Wilson Library Bulletin ($17)

* Kent State University SLS Library does not hold a current subscription.

F Free to members; no subscription rates given.

? No subscription rates given.

Table 31

Titles Currently Subscribed
to by The Ohio State
University Libraries

*	1.	Archives (L 8)
	2.	Bibliographical Society of American Papers ($15)
	3.	Book Collector (L 12)
	4.	Bulletin of Research in the Humanities ($15)
	5.	Columbia Library Columns ($7.50)
+	6.	Dartmouth College Library Bulletin (?)
#	7.	Film Library Quarterly ($12)
	8.	Harvard Library Bulletin ($25)
*	9.	IFLA Journal (DM 68)
*	10.	Information Processing and Management ($132)
	11.	Journal of Documentation (L 28)
*	12.	Law Library Journal ($24)
	13.	Library History (L 4)
+#	14.	Library of Congress Quarterly Journal ($9)
	15.	Library Science with a Slant to Documentation (?)
	16.	Library; Transactions of the Bibliographical Society (?)
*	17.	Libri (Kr 318)
	18.	Medical Library Association Bulletin ($30)
#	19.	On Line Review ($45)
	20.	Phaedrus ($12)
	21.	Princeton University Library Chronicle ($7.50)
	22.	Program; News of Computers in Libraries (L 17)
#	23.	Public Libraries ($10)
	24.	Research in Librarianship (L 7.50)
	25.	Sightlines (F)
	26.	Special Libraries Association. Geography and Map Division Bulletin ($17)
	27.	Yale University Library Gazette ($14)

* Held by OCLC Library
\# Held by Public Library of Columbus and Franklin County Library
\+ Held by the Ohio Historical Society
F Free to members; no subscription rates given
L British pound
? No subscription rates given

Table 32

Titles Currently Subscribed
to by The State Library of Ohio

*	1.	Australian Library Journal (?)
	2.	Idaho Librarian ($7)
	3.	Information - Reports and Bibliographies ($50)
	4.	Interface (F)
#*	5.	Journal of Education for Librarianship ($12)
*	6.	Journal of Librarianship (L 11)
	7.	New Jersey Libraries ($10)
	8.	New Library World (L 12)
	9.	Show-Me Libraries (?)
	10.	Southeastern Librarian ($5)
#*	11.	Unabashed Librarian ($15)
	12.	West Virginia Libraries ($5)
#*	13.	Wisconsin Library Bulletin ($5)

* Held by OCLC Library
\# Held by Public Library of Columbus and Franklin County Library
F Free to members; no subscription rates given
L British pound
? No subscription rates given

collection has specialized titles on automation, more academic library bulletins, and more foreign English titles. The State Library of Ohio provides the only source for regional and state association periodicals.

Finally Table 33 lists titles held at Kent State but not currently subscribed to by either central Ohio library. As symbols in Table 33 indicate, some titles are available in the OCLC, Public Library of Columbus and Franklin County and Ohio Historical Society collections. A comparison of this table with periodical listings in Appendix D suggests that some courses would require reprint or xerox copy files to support course assignments. Examples would be the library research course, the state library course, and the newspaper library course. Collection gaps occur principally for association and state periodicals and for recent titles such as Behavioral and Social Science Librarian and Library Research.

Availability and Access

Central Ohio periodical collections appear sufficiently diverse to support most core courses and some electives. Any curriculum committee planning expanded programs in graduate library education should examine the collection evaluation report when developing off-campus offerings or when conferring with appropriate libraries regarding future title acquisitions, collection duplication etc.

Some comments on access to titles might be mentioned here. Not one of the central Ohio libraries includes the support of a graduate library education program as part of its primary mission. This is

Table 33

Titles Not Currently Subscribed
to By Either Ohio State
University Libraries or The
State Library of Ohio

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* 1. Asis Bulletin ($27.50)
2. Assistant Librarian (F)
3. Australian Academic and Research Libraries (Aust $12)
4. Behavioral & Social Sciences Librarian ($15)
* 5. Catholic Library World ($20)
6. Georgia Librarian ($10)
7. Indiana Media Journal ($10)
* 8. Journal of Micrographics ($35)
9. Junior Bookshelf (L 3)
10. Learning Today 9$14)
11. Library Research ($35)
12. Louisiana Library Association Bulletin ($6.50)
13. Moccasin Telegraph (F)
14. NYLA Bulletin (F)
15. Nebraska Library Association Quarterly (F)
16. News Notes of California Libraries ($6)
17. North Carolina Libraries ($3)
18. Pacific Northwest Library Association Quarterly ($10)
\# 19. Public Library Quarterly ($24)
\+ 20. Restaurator (K 276)
21. School Librarian (L 9)
22. South Carolina Librarian ($3)
23. Tennessee ($6)
24. Texas Libraries (?)

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* Held by OCLC Library
\# Held by Public Library of Columbus and Franklin Columbus Library
\+ Held by the Ohio Historical Society
F Free to members; no subscription rate given
L British pound
? No subscription rates given

a valid situation since funds are not budgeted for an ALA accredited degree program at any of the central Ohio academic institutions. Collections are developed for professional staff needs and for the needs of the service community (e.g., media courses at Ohio State University). Policies governing the collection are therefore not designed for library science course support, nor should they be at this point in time.

Because of this some extension students have noted difficulty in accessing periodicals titles, especially current issues. Current issues may be circulating among staff members and are therefore not readily accessible. Current issues may circulate outside the library at the State Library of Ohio but bound volumes are restricted to in building use. Students needing bound titles available only at the State Library of Ohio must therefore use the collection between 8a.m. and 5p.m., Monday through Friday. Again the mission of the State Library is to serve state government and public library needs, not those of KSU-SLS graduate library education students who work full-time during the week.

In contrast current issues do not circulate at The Ohio State University Libraries. Bound volumes of periodicals located in the OSU Education Library generally circulate for one day, some up to one week. Only older volumes (e.g., pre-1965) circulate for longer periods. Most of the library science periodicals are located in the main library collection and circulate between one to three weeks. Extension students with OSU courtesy cards may have materials recalled. They face the same problem every OSU student confronts:

waiting for materials to be returned in time for completing quarter term course assignments.

Similar problems occur for non-periodical titles. Again single copies of most titles serve central Ohio library purposes, whereas multiple copies are required to support graduate courses. To alleviate access difficulties, the KSU-SLS faculty has shipped materials to the OSU main library for reserve collections. The Ohio State University and Public Library of Columbus and Franklin County libraries have also permitted the extension program to place library materials on reserve, as part of the cooperative agreements. Students must use these materials in-house; some commuting students carp at this policy.

These problems of collection accessibility and adequacy are addressed in guidelines proposed for library services to extension and non-campus students.

Guidelines for Library Services to Extension/Non-campus Students

The ACRL Standards and Accreditation Committee disseminated its draft of proposed guidelines for extension program library services in the October, 1980 issue of Colleges and Research Libraries News [64]. These proposed guidelines are reproduced in Appendix E. This content is summarized below.

These guidelines are based on the assumption that academic programs have the responsibility of providing adequate library services for all extension offerings, be they credit courses, independent studies, courses offered through electronic media, or non-credit courses. The guidelines assume that funds will be

regularly budgeted for extension library services at a rate comparable to main campus services (i.e., similar per student expenditures). Library personnel need not be located at the extension sites, but they should work with appropriate faculty in meeting extension needs, delivering materials, etc.

Materials for extension course offerings may be made available through development of branch libraries, contracts with local libraries, delivery of materials to extension sites, or development of a cooperative branch library using services of area libraries. Students in extension programs should have access to library orientation programs, reserve collections, periodicals, and on-line searches to the same degree normally available to main campus students.

The connecting thread running throughout these guidelines is that the parent institution is responsible for providing quality library services to support off-campus programming and if quality services cannot be insured, then this programming must be withdrawn. The guidelines and the resource evaluation results direct the KSU-SLS Columbus Extension Program to consider the following.

1. Reinvesting income from extension programs in a central extension collection of current library and information science periodicals.

2. Improving student access to on-line literature searches in the Columbus area through negotiation and/or equipment expenditures

3. Providing a mechanism for adjunct faculty input into collection development at Kent State regarding extension services

4. Creating a central collection of multiple copies of key works needed to support core courses and type-of-library courses

5. Improving the resources needed to teach the cataloging courses

6. Moving into a consortium arrangement in which joint programs would be supported by cooperative library services, etc.

Central Ohio area libraries have voluntarily provided many of the services suggested in the guidelines. Others have been covered in cooperative agreements. The central Ohio region at present is best equipped to meet extension student needs but still has inadequate resources for a diversified, quality program. The improvement of these library resources and supporting equipment resources should be a priority in any expansion efforts.

CHAPTER V

GRADUATE LIBRARY EDUCATION IN OHIO: ALTERNATIVE PROGRAM OPTIONS FOR THE 1980'S

The Graduate Education for Librarianship in Ohio Project analyzed the need for additional graduate library education programming in Ohio, identifying regions that might support alternative programs in terms of students, employment opportunities and library resources. The project studied four programming alternatives and examined the advantages and disadvantages of each, given the results of the needs assessment and existing guidelines on off-campus and graduate library education programs.

This chapter concludes with a three phase plan for future program development. First the implications of the context evaluation results will be summarized, organized around a series of questions that future planning committees will need to address.

Are additional programs in graduate education in library science needed in Ohio?

Both ALA accredited degree programs are located in northeastern Ohio. Enrollment studies indicated that roughly 180 school librarians and library paraprofessionals would definitely pursue graduate degrees in library and information science if such programs were locally available in regions other than northeastern Ohio. This number would jump to over 400 if individuals still wavering in their educational plans were included in the potential student pool. Granted, not all students

would follow through on their "paper and pencil" career plans nor would all necessarily meet admission standards. These estimates do indicate, however, that areas presently unserved or underserved by ALA accredited library education programs could benefit from some form of additional, quality programming.

While the enrollment studies indicate sufficient interest to explore additional programming, the personnel projections point to a tight job market for Ohio librarians through 1985, improving towards the end of the decade but remaining competitive. Anticipated expansion was built into the supply projections of both the two ALA accredited programs and the educational media programs. Additional programming in other regions of Ohio could therefore be accommodated.

The majority of potential students surveyed would pursue degrees on a part time basis. From the experience of students in the KSU-SLS Columbus Extension Program, a part time program requires three to four years for completion, assuming no more than two course are taken per term. This suggests that new students would not graduate until 1985 or later when the job market is expected to improve.

In addition many respondents holding professional positions but lacking an MLS degree commented on the desirability of more continuing education opportunities in local areas. Both credit and non-credit courses are therefore desired.

The offering of ALA accredited library education programs and/or coursework in areas other than northeastern Ohio seems justified. Given the current economic environment, expansion beyond the current level of the KSU-SLS Columbus Extension Program should progress cautiously and

should focus on quality of existing programs and resources as well as geographical scope. The King Research study which is currently examining the national supply and demand conditions in the field of librarianship through 1990 should be watched closely. Results of the two year project are scheduled for release after September, 1982 [65].

If additional programs and/or coursework were created, where should they be located?

In part the answer to this question depends on the type of programming to be offered. If options include one-time only workshops, most regions of Ohio might benefit. If alternative programs are restricted to consistent offerings of credit and/or non-credit coursework in the field of library and information science, some locations in Ohio emerge as more appropriate sites.

Northeastern and central Ohio are the areas best suited to support graduate programs in library and information science. If the Kent program were to relocate, then additional programming would be needed in northeastern Ohio. If the Kent program were to remain in its present location, then central Ohio should receive first priority.

The conditions supporting a central Ohio location are as follows:

1. Central Ohio was the area advertising the most new professional positions during the period 1976-1980.
2. Central Ohio has the widest variety of employment opportunities.
3. Libraries in central Ohio projected some slight expansion in professional staff between 1980 and 1990.
4. Next to Cleveland libraries, Columbus area libraries employ the highest percent of professional librarians, and by extension, the second largest pool of paraprofessionals who might seek advanced degrees.

5. Central Ohio had the highest number of residents interested in graduate degrees in librarianship (i.e. 83-173).

6. Central Ohio libraries had the best professional collections among institutions not currently supporting ALA degree programs.

7. Central Ohio already has the foundations for additional programming in the KSU-SLS Columbus Extension Program.

8. The headquarters of the principal library and information science agencies are located in central Ohio, e.g., Ohionet, Inc.; OCLC, Inc.; the State Library of Ohio; Ohio Library Association; Batelle Memorial Institute, etc.

9. Personnel at these principal agencies were not included in enrollment estimates so central Ohio figures actually underestimate potential enrollment.

The other areas which could support more limited offerings in library and information science would be southwestern and then northwestern Ohio. The student demand in southeastern Ohio is minimal.

Southwestern Ohio had a higher number of students interested in a graduate degree in library and information science (i.e. 61-128) than did northwestern Ohio (i.e. 43-83). Southwestern Ohio also offered a higher percentage of projected employment opportunities for professional staff than did northwestern Ohio (i.e. 21 percent vs 11 percent). Also the southwestern region, especially the Dayton area, would be closer to a regional base, being only 1½ hours from the KSU-SLS Columbus Extension Program. The time required for travelling between Kent and the Toledo/Bowling Green area is closer to 2½ hours.

Both northwestern and southwestern Ohio are currently served by graduate programs in library and educational media/technology. Library associates and school librarians in both areas would choose the library and information science cognate more frequently than the educational media area. This may be due to two factors: 1) the MLS degree from an

ALA accredited program is generally required for advancement from para-professional to professional status in academic and public libraries, and 2) school librarians anticipate difficulties in finding enough coursework beyond their media certification hours for earning a graduate degree at their undergraduate alma mater.

Neither southwestern or northwestern Ohio could currently support the level of programming currently available in central Ohio. Compared to southwestern Ohio, northwestern Ohio libraries have better library resources for graduate library education courses. Both areas, however, would require considerable upgrading of professional collections. In addition, northwestern Ohio had a tighter concentration of potential students; all southwestern students could not as easily be served by a central location (e.g. Wright State University or Miami University) as would be the case in northwestern Ohio.

If courses could be offered in only one area other than Columbus, the Dayton area seems the most logical choice. Residents in the Cincinnati and Toledo areas do have access to out-of-state ALA accredited programs; Dayton residents are more isolated. Fee schedules of out-of-state programs, however, are prohibitive for non-residents, e.g., the University of Michigan charging $228 per credit hour and the University of Kentucky charging $107 per credit hour compared to $64 per credit hour at Kent State University [66].

<u>If additional opportunities for earning graduate degrees in library and information science were created in Ohio, what specific objectives should these programs establish?</u>

Beyond the traditional objectives of an MLS degree program, alternative programs should be developed to meet specific needs identified

in the context evaluation of this study. Sample objectives might include the following:

1. To provide access to quality graduate level coursework and ALA accredited programs to the following groups:

   a. individuals working at paraprofessional levels in all libraries who have the necessary background and ability to pursue graduate studies and seek to upgrade their professional status

   b. individuals performing professional level tasks in small public libraries and in special libraries but lacking professional library science training

   c. individuals desiring specific library science course offerings for the purpose of continued professional development

   d. certificated school librarians seeking the range of career options that the ALA accredited degree affords

2. To provide convenient access to quality graduate coursework to full-time library employees through evening and weekend schedules, mini-courses, instructional applications of video and computer technology, and other instructional formats.

3. To provide a variety of course offerings to permit development of specializations in continuing demand (e.g., management, audio-visual/media, computer applications and systems analysis, community outreach, children's services, etc.) within the following restrictions:

   a. adequate library and equipment resources to support courses

   b. availability of qualified teaching personnel, both area instructors and instructors from the main campus

   c. sufficient enrollment, and

   d. non-duplication with existing programs in the geographical area

4. To provide access to quality graduate library education courses to Ohio residents at fee levels comparable to those charged by Ohio state supported institutions within the restrictions cited in Objective 3 above

5. To provide coursework which builds on the pre-professional and professional experience of students and/or provides practicum and internship opportunities for those lacking experience or

those seeking experience in speciality areas

What would be the advantages and disadvantages of each of the four program "models" given the results of the needs assessment and existing guidelines on off-campus and graduate library education programs?

A New Program

As Dean Wasserman recommended in 1969, The Ohio State University provides the best site for the establishment of a new graduate program in library and information science. Such a new program in central Ohio could offer an innovative curriculum for preparing librarians to handle the total information process. A new program in central Ohio would eliminate problems of long distance advising, lack of exposure to the full resources a graduate faculty provides, potential overreliance on part time faculty, regular assessment of student performance, etc. A new program could draw upon the existing resources and expertise available in central Ohio, creating practicum and internship opportunities and fostering more faculty-practitioner exchange. In short a new program would be an answer to the current maldistribution of quality, state supported ALA programs in Ohio. Kent State University could serve northern Ohio and the Ohio State University, central and southwestern Ohio.

In the 1976 Master Plan, the Ohio Board of Regents strongly recommended the creation of high quality, practice-oriented master's programs throughout the state for the provision of professional advancement and lifelong learning opportunities. One stipulation, however, was that "a university proposing a new practice-oriented program must be able to demonstrate that sufficient need exists to justify the commitment of faculty and facilities" [43, p. 57].

Sufficient need may exist in central and southwestern Ohio to justify additional programming, but not creation of a third program. The job market will remain tight in Ohio through 1990. Some expansion of the two existing degree programs was built into the supply and demand analysis. The market could not accommodate graduates of a third program. The current thinking among some library educators is that the number of ALA accredited programs should be reduced and enrollment curtailed.

If The Ohio State University were to establish a new program, Kent State University would need to disband its extension program in Columbus. Extension programs furnish approximately 25 to 30 percent of the KSU-SLS student FTE. It is likely that the KSU-SLS program would build on its Cleveland program and create new services in the northwestern region. The number of projected SLS degrees awarded would therefore remain realistic.

In 1971 The Ohio State University had authorization from the Ohio Board of Regents for both master's and doctoral work in library science. The financial crunch of the 1970's and prohibitive start-up costs precluded program implementation. A decade later, the financial picture has not drastically altered. A new program would require estimated start-up costs of $250,000 and an annual operating budget of between $375,000 and $400,000. During this period of retrenchment, such expansion is unrealistic. It is also doubtful if the 100 to 125 FTE needed to support a new program would be provided by the projected part time enrollment by Columbus and Dayton area residents.

A new program is one option for meeting central and southwestern Ohio needs for graduate library education courses and programs. The disadvantages of such an option outweigh the advantages, especially since

other options present similar advantages.

A Program Transfer Model

The rapid expansion of the KSU-SLS Columbus Extension Program has already been discussed. The declining enrollment and reduced offerings at the Cleveland site and the drop in main campus enrollment last year prompted the inclusion of a program transfer model as a programming alternative. Basically this approach would require the relocation of the KSU School of Library Science to an area of higher need.

Such a transfer would eliminate the need for the Columbus extension program and its attending difficulties, but would probably require considerable expansion of the Cleveland extension program. Otherwise the area of need would simply shift from central and southwestern Ohio to northeastern Ohio. At present between 25 and 30 percent of the KSU-SLS student FTE comes from extension programs. It seems unlikely that the projected part time student populations in the Columbus and Dayton areas could support the entire program. As already noted, urban universities tend to attract higher numbers of part time students.

In addition while central Ohio libraries projected some expansion, the majority of new Ohio positions will appear in northeastern Ohio. Also over 70 percent of the graduates of the two ALA accredited Ohio programs found employment in northeastern Ohio in 1979. The northeastern libraries employ about 40 percent of Ohio professional librarians, and by extension, the largest pool of paraprofessionals likely to seek graduate degrees. If the KSU-SLS program were to relocate, then this northeastern pool would either turn to the Cleveland extension

program, swelling it to a size perhaps equalling the Columbus program, or would need to pay the $200 per credit hour fees required by the Case Western Reserve University program. It seems that the KSU-SLS program is needed in the northeastern Ohio region to provide qualified professionals for northeastern libraries and to serve the part time student population currently employed in these libraries.

It is also improbable that the Ohio State University, the appropriate site for this transfer, could absorb the entire KSU-SLS program. There definitely would be duplication in the school library area and in children's literature. The question of program location within the OSU structure would not be answered any more easily now than it was in the early seventies. The College of Administrative Sciences, the College of Education and the College of Engineering were all recommended as potential sites at that time. Now that The Ohio State University has a strong computer and information science program and a rapidly expanding educational media program, the absorption of a total program and its faculty could be problematic.

The KSU-SLS program is preparing for a re-accreditation visit in 1983. The logical action on the program transfer approach would be postponement. In the meantime the KSU-SLS faculty can continue to improve the extension program as it exists to insure re-accreditation, explore the consortium alternative, assess the impact of the CWRU endowment on the need for state supported library education in northeastern Ohio, and then reconsider the program transfer "model." An expanded extension/consortium in central Ohio, branching into southwestern Ohio, might then be able to support the entire program or the

continued need in northeastern Ohio might warrant splitting the program between the Columbus and Kent-Cleveland sites. For example, since many of the courses offered in Cleveland are typically not offered in Columbus (e.g. services and materials for children and adolescents and storytelling), this might be one area where core faculty would remain in the northeastern service area.

If the program transfer model emerges as a viable alternative at this later date, it would then be appropriate to develop policy statements relating to institutional compensation for transferred resources, retraining of tenured faculty who cannot move, degree completion for students who cannot move, etc.

An Extension Program

As stated earlier, central Ohio ranked second to northeastern Ohio as the region with the highest student demand and the most employment opportunities for program graduates. For the 1981-1982 academic year, continuation and improvement of the extension program are reasonable courses of action. This would provide access to practice-oriented, master's level courses and degrees in areas of need, as recommended by the 1976 Master Plan for Ohio higher education.

The improvement of the extension programs should receive immediate attention for two reasons. First the impending re-accreditation of the KSU-SLS program in 1983 will include examination of extension offerings. The ALA Committee on Accreditation issued an addendum to the standards for accreditation relative to extension/off-campus offerings [67]. This stressed that off-campus programs must provide curriculum content, faculty

expertise, student advisement, financial support and physical resources and facilities equivalent to the main campus program. Quality control was the COA concern.

This concern has been shared by the Ohio Board of Regents. The Board is charged with the responsibility of monitoring the multitude of off-campus offerings created since 1975 when these programs became eligible for partial state subsidy at the master's and professional level I. The Regents Advisory Committee for Graduate Study recently approved guidelines for the review and approval of graduate off-campus programs. All proposed off-campus programs and all programs existing prior to September 1, 1980 are subject to site specific review. This review applies to any graduate off-campus program which enables students to earn 50 percent of their minimum degree requirements away from the main campus.

As with the COA standards, the Regents' off-campus guidelines emphasize academic quality. They also establish pragmatic review criteria which will affect future expansion of the KSU-SLS extension offerings. For instance the expansion of off-campus programming into southwestern and northwestern Ohio could only be justified if the KSU-SLS program could "meet its overall off-campus commitments without overextending itself with regard to faculty, facilities, and student support" [68, p. 9]. All areas must demonstrate "the ability to maintain critical mass of students at the site(s)", respond to societal demand for "employment and professional development opportunities" and receive support and commitment from the parent institution.

To reduce inter-institutional conflict and foster cooperative programming, approval of a site specific program would involve the examina-

tion of alternatives available within a 50-mile radius of the proposed site. Reviewers would examine comparable programs in the geographical area as well as off-campus offerings of other institutions. Consequently Dayton and Toledo area offerings could not duplicate the educational media programs in these areas and the Columbus program would need to continue its current unwritten agreement with the OSU media program regarding non-duplication of school library offerings.

The limited resource evaluation of this study, supplemented by informal conversations with Columbus part time faculty and students, points to two areas needing immediate improvement: 1) staffing of the Columbus extension office and 2) upgrading of the library materials and equipment needed to support core courses and electives consistently offered in the Columbus area. To provide Columbus students access to on-line searching equipment equivalent to the main campus would require a one-time expenditure of approximately $16,000 for terminal purchases, $8,000 annually for rental of modems, use of databases, and equipment maintenance; and a nominal fee of $1200 for leasing of laboratory space at The Ohio State University. To insure access to current key periodicals, multiple copies of key works for course support, and continued collection development for extension use would require commitment of an annual extension library service budget of $12,000-$17,000. This figure is computed as one-third of the annual acquisitions budget of libraries such as those supporting the Columbia University program, the CWRU program, etc. The one-third proportion assumes it would not be necessary to duplicate all local holdings but only those most frequently used by students.

Improved staffing of the extension office would require a full-time coordinator, an assistant dean perhaps for extension and continuing education, supported by a permanent, half-time secretary. In addition to pursuing the objectives listed earlier, the assistant dean would coordinate existing extension offerings and proposed offerings, develop proposals for Board of Regents' review, provide greater access to student counseling and placement services, create a unified extension curriculum in conjunction with the main and off-campus faculties, work more closely with local, part time faculty members on instructional development, and provide students with a reasonable substitute for a main campus "residency" experience. This additional staffing would require a total extension office budget of approximately $33,00 to $34,000 (i.e. $30,000 in annual salaries, a nominal fee of $1,200 for office space, and office and travel expenses of $2,00-$3,000). This minimum figure exceeds present costs by approximately $18,000.

To date both extension sites have been self-supporting. Profit from student fee income, after subtracting instructor salaries and the nominal compensation to cooperative institutions, has been sufficient to meet the costs of the extension office and staff. Projections for the 1980-1981 Columbus program estimated a net profit of roughly $7,000. The additional annual costs outlined above, excluding equipment expenditures, would total approximately $39,000 with a full-time extension dean, $27,000 if only a permanent half-time secretary were added to present operations.

Obviously the program could not support this degree of improvement through fee income. Several options are available. The Kent State University could reinvest portions of the state subsidy income yielded

by the extension program . In addition appropriate Kent State University executive officers could continue their efforts to increase the library science subsidy from level I ($2,840) to level II ($5,213). While this increase would only affect main campus income, all off-campus offerings receiving level I subsidy regardless of field, it would have provided, for instance, an additional $166,000 income for the KSU-SLS program in 1980-81. This is based on the main campus Fall, 1980 FTE of 69.96 and the level I-II difference of $2,373. Not only would this permit the filling of the position still vacant in the permanent faculty but would support the improvements proposed above, including the equipment expenditures, and would permit expansion and development of courses/resources in the Dayton and Toledo areas.

If level II subsidy is not achieved and the policy of extension support through fee income continues, then the estimated $7,000 net profit from the extension program in Columbus could best be spent in building a central collection of course supporting materials. Access to an equipment laboratory comparable to the main campus could be achieved by implementing the residency policy recommended by the KSU-SLS faculty. Intensive automation and information retrieval courses could be offered on Saturdays and Sundays in Kent with all extension students required to take at least the core automation course on the main campus. A similar scheduling of the cataloging course might also be provided, since this was another core course with limited resources in the Columbus area.

The enrollment survey's findings on a full-term residency requirement suggest this might reduce the number of students interested in the

program. It should be noted, however, that most extension programs offered by ALA accredited degree programs do require completion of a significant portion of the coursework at the main campus, e.g., the University of Rhode Island regional extensions at University of Massachusetts, University of New Hampshire, and University of Connecticut; the experimental field-based school library program of the University of North Carolina in Portsmouth, Virginia; and the Pratt Institute Westchester Extension located at Sarah Lawrence Campus in Bronxville, New York. Since the Ohio Board of Regents and the COA standards emphasize access to quality programs, elimination of two inadequately supported courses from extension offerings might be unavoidable.

A Consortium Program

Three program alternatives have been discussed. The new program and the program transfer model do not seem justified, given the current employment and regional needs. Proponents of voluntary consortia [69] specifically argue against program transfers, citing costs, adverse alumni reaction, and community sentiments as potential barriers. The extension program, as discussed earlier, is one solution to the problems of maldistribution of graduate library education. It is plagued by inadequate resources, potential overcommitment of faculty, potential inter-institutional conflicts, etc. It also cannot provide the full range of coursework for development of specializations such as management, systems analysis, media, etc. The consortium model has been recommended as one option for survival in the 1980's [48].

Because consortia assume many forms and serve diverse functions, a brief overview of alternatives seems appropriate. The Academy of

Educational Development classifies consortia by their activities, i.e., administrative and business services, enrollments and admissions, academic programs, libraries, student services, faculty, and community services [70]. Examples of activities include the following: [49, 69]

> administrative cooperation: joint purchasing plans, service contracts on equipment, group insurance plans, long range planning, coordinated calendars and schedules, tuition reciprocity,...
>
> academic programs: credit transfer without case by case evaluation, combined (dual) degree programs, cross listing of courses, cross registration with tuition reciprocity, joint majors and degrees, joint curriculum development, academic advisement, continuing education, instructional resources, television networks,...
>
> faculty and staff: faculty exchange, visiting scholar programs, team teaching across campuses, grant projects, faculty development,...
>
> facilities: administrative space, classrooms and teaching laboratories, library materials through overnight van service, union catalogs, coordinated library acquisitions, common library cards, special collections, ...
>
> student and community activities: placement centers and services, work-study opportunities, joint orientation programs,...

Case studies of volunatry consortia categorized consortia into three classes: 1) small, informal partnerships based on mutual, understood agreements among neighboring institutions, 2) regional/urban groupings of six to twenty institutions coordinated through a governing board, and 3) special purpose groupings of distant campuses linked by a special purpose [69].

Governance structures vary. Large consortia typically form autonomous organizations with administrative officers and staff who implement policies of a Board of Directors [70]. If a degree program is the only joint program, then a joint committee with representatives from relevant

departments is often established. If cooperation is restricted to course exchange, then program deans can normally handle governance and policy issues.

The budget may be a bartering system with no costs involved in small partnerships. In larger consortia, the separate organization may be supported by a flat fee charged to each institution or by a fee based on enrollment /69/. In joint degree programs, the degree granting institution may collect all income and distribute to cooperative institutions according to a previously negotiated, cost sharing formula /71/ .

Successful consortia may be characterized by the geographical proximity of institutions, their complementary resources, climates of understanding, unique contributions made by participating institutions, and presidential support /69/. Non-quantifiable educational benefits derived from consortia include "duplication avoidance, quality instruction, instructional diversity, increased access, additional funding sources, increased communication, alternative approaches, increased efficiency, greater planning and control, and improved leadership structures" /72, p. 2/. Despite the difficulty of documenting evidence of costs and benefits of consortia, case study analyses have concluded that cooperation is cost effective /72/.

One observation that can be made after reviewing the diversity of consortial arrangements is that the KSU-SLS Columbus Extension Program is already a cooperative body of academic and non-academic institutions in central Ohio. For a nominal compensation, cooperating libraries provide administrative space, classrooms, and access to teaching resources and library collections. Professional librarians in the area serve as off-campus faculty almost on an overload pay basis. Area libraries provide

reserve collections, courtesy cards, and practicum opportunities. In return the program provides convenient access to degree programs and the opportunity for professional staff development through teaching and "guest lecture" appearances. The actual assistance given to the KSU-SLS program exceeds benefits set forth in written cooperative agreements.

If the extension program follows a consortium approach, how can consortial arrangements alleviate the difficulties described above? As one Columbus part time faculty observed, some of the problems regarding collection access could be solved by some simple planning and communication among members of the Columbus part time faculty. The donation of duplicate periodicals to the Columbus extension program by the OCLC library is an illustration of other resources that may be untapped in the region. Granting the extension coordinator adjunct faculty status with costs "contributed" by Kent State University would facilitate extension utilization of services provided through cooperative agreements without the incurrence of additional costs.

More formal solutions might include joint purchasing and service contracts. Both the OSU educational media program and the KSU-SLS program could benefit from the development of an equipment laboratory similar to the one at Kent. Joint purchasing would reduce individual institutional expense, increase student access and avoid costly duplication. Similar cooperation could occur in upgrading library collections for course support to benefit both institutions. Rather than purchasing periodicals that duplicate OSU holdings, the extension program could invest in new titles for joint use. Team teaching and alternative

offerings of reference and all cataloging courses could be explored. Credit transfer procedures could be formalized so that up to 11 hours of the MLS degree could be devoted to a school library/media specialization in an expanded program. Course schedules might be jointly developed so that students from both institutions might drawn on all courses offered in the Columbus area when building their degree programs. Cross listing of courses and joint registration procedures would help students negotiate the systems of both institutions. If warranted, cooperation could lead to either joint ALA accredited degree programs with specialization in at least educational media, and perhaps information science. Dual degree programs in areas such as law and music could also be explored. Coordination of field placements, practicums, and internships might also be a cost effective venture to explore.

A survey of key university personnel throughout the state, and administrators of major academic and public libraries plus informal discussions with area faculty revealed the consortium model is the favored approach for additional programming in the state. Wright State University has expressed an interest in exploring programming which complements WSU curricula. Toledo libraries seek KSU-SLS participation in a Michigan-Ohio consortium of ALA accredited programs. The KSU-SLS program wishes to discuss cooperation in offering specialty areas in northeastern Ohio with the CWRU program

The first priority of the KSU-SLS program will probably be the improvement of the Columbus extension program through consortial arrangements. The impact of such arrangements on the main campus program will be examined and then the KSU-SLS faculty can determine

if additional expansion can be supported.

The details of fee income and subsidy sharing, governance, and curricula requirements would need to be negotiated in each case. The recent study of consortia by the Council of Interinstitutional Leadership stressed that faculty members from all institutions must be involved in initial planning, that governance and procedural details should be formalized in written agreements, and that programs need to proceed through regular review channels at all institutions involved /48/. Precedents for cooperative degree programs already exist at The Ohio State University, Miami University, Wright State University, and Kent State University, among others.

As part of the planning effort, cooperative ventures such as the KSU-SLS/OSU Columbus Consortium should strive for main or at least branch campus status. Such programs receive full subsidy at the appropriate level in the former case and at level I in the latter. If branch campus status had been available in Fall, 1980, the increase in Columbus extension subsidy would have totaled $15,713, given the Fall, 1980 FTE of 22.13 in the Columbus program. This alone could have provided start-up costs for a shared equipment laboratory, located perhaps in the Edgar Dale facility at The Ohio State University.

Additional funds for sharing office and classroom cost could be generated through a $10 per credit hour fee for use of the OSU library and campus facilities. This would merely replace the Kent bus service fee which extension students do not pay. With these additional sources of income, adequate library collections could be developed for joint program use and an on-campus residency could be provided in Columbus.

The first step to achieving this expanded cooperative relationship is the formation of an inter-institutional task force to study mutually beneficial forms of cooperation. A three year plan for such joint planning is suggested below.

A Three Phase Plan

Phase One: 1981-1982

1. The coming year will witness maintenance of the current level of operation. The half-time coordinator position will be continued.

2. A joint task force with representatives from all levels of The Ohio State and Kent State University programs and representatives from other cooperating institutions will meet to explore cooperative programming and resource sharing. Priorities for the year should include development of collections for support of the cataloging course and developing additional access to OCLC and on-line bibliographic searching. Improved continuing education opportunities for professional staff of cooperating libraries should be considered as part of this exchange.

3. Development of the extension program faculty as an organized body should also be a priority for 1981-1982. This faculty should be represented in all joint planning efforts. Adjunct appointments might be considered to improve program continuity.

Phase Two: 1982-1983

1. Depending on the progress of 1981-1982 joint planning, the

half-time coordinator position will be expanded to the full-time position of assistant dean for extension and continuing education, supported by a half-time secretary. The assistant dean will continue 1981-1982 planning efforts, focusing on joint degrees and other joint program offerings.

2. If warranted, proposals for joint programs will be developed by the joint task force through appropriate review channels.

3. The extension/consortium program will remain the KSU-SLS degree program through 1982-83 to insure provision of the ALA approved degree.

4. Cooperative arrangements will be explored with the Wright State University, University of Toledo, Bowling Green State University and other interested institutions, if support appears forthcoming.

Phase Three: 1983-84

1. Depending on the outcome of the re-accreditation visit and the degree of joint programming proposed and approved, the KSU-SLS program may begin to offer several MLS degrees: 1) the existing degree, 2) a KSU-OSU joint degree with media concentration, and 3) an expanded dual major degree.

2. Even if joint degrees are not developed, mutually beneficial cooperative arrangements should be continued for maximum cost effectiveness.

Costs for the continuation of the extension program have already been discussed. The progress of the task force in developing ways of avoiding unnecessary duplication of resources and the progress of KSU administration in achieving more appropriate subsidy levels for library science and extension/joint programs will determine the nature of costs

falling to participating institutions in phases two and three of the proposed planning effort.

References

1. Wasserman, Paul. A Report on the Need for Additional Programs in Library Education at the Graduate Level in the Publicly Supported Higher Education System of the State of Ohio. Prepared for the Board of Regents of the State of Ohio, June 16, 1969.

2. Rogers, A. Robert. Extension Programs: Cleveland and Columbus. School of Library Science, Kent State University, September, 24, 1979 (mimeo).

3. Memorandum of "Results of Survey Taken to Determine Need for Extension Graduate Courses to be Offered in Dayton by an ALA-accredited Library School" from the Personnel Committee, Library Division, Dayton-Miami Valley Consortium, March 2, 1978.

4. Memorandum from A. Robert Rogers to Members of the Faculty re: Annual Meeting of the Advisory Council of the School, School of Library Science, Kent State University, September 25, 1979.

5. Report to the Committee on Accreditation of the American Library Association. School of Library Science, Kent State University, October, 1980.

6. Trombetti, L. K. Extension Programs: A Cry from the Lost Tribes. Student research paper for L.S. 60600, August 25, 1979 (mimeo).

7. Ajami, Sandara and others. Kent to Columbus- How Far Apart. Student research paper for L.S. 60604, December 14, 1979.

8. Memorandum from A. Robert Rogers to Associate Vice President Alfonso re: FTE and Income, School of Library Science, Kent State University, November 3, 1980.

9. Comments on the 1977-78 Annual Report of School of Library Science Kent State University. Committee on Accreditation, American Library Association, October, 1978 (mimeo).

10. Rogers, A. Robert. School of Library Science Annual Report, 1979-1980. Kent, Ohio: School of Library Science, Kent State University, 1980.

11. Rogers, A. Robert and Kim, Mary T. A Survey of Projected Personnel Needs in Ohio's Academic, Public, Special and School Libraries. Kent, Ohio: The Graduate Education for Librarianship in Ohio Project, School of Library Science, Kent Stae University, March, 1981.

12. Rogers, A. Robert and Kim, Mary T. Enrollment Projections in Library and Information Science and Educational Media in Ohio, 1981-1985+. Kent, Ohio: The Graduate Education for Librarianship in Ohio Project, School of Library Science, Kent State University, April, 1981.

13. Kim, Mary T. and Rogers, A. Robert. The Job Market in Ohio, 1976-80: An Analysis of Position Advertisements for Public, Academic, Special and Other Library Vacancies in Ohio. Kent, Ohio: The Graduate Education for Librarianship in Ohio Project, School of Library Science, Kent State University, January, 1981.

14. Rogers, A. Robert and Kim, Mary T. A Quantitative Evaluation of Library and Information Science Periodical Collections in the State of Ohio. Revised edition. Kent, Ohio: The Graduate Education for Librarianship in Ohio Project, School of Library Science, Kent State University, March, 1981.

15. Rogers, A. Robert and Kim, Mary T. Periodicals Holdings of Twenty-three Ohio Libraries with Major Periodical Collections in the Library and Information Science Field. Kent, Ohio: The Graduate Education for Librarianship in Ohio Project, School of Library Science, Kent State University, March, 1981.

16. Gaver, Mary. "Crisis in Library Manpower - Myth and Reality," ALA Bulletin, 61 (May, 1967):527.

17. Castagna, Edward. National Inventory of Library Needs. Chicago: American Library Association, 1966.

18. Ennis, Philip. Ohio Library Manpower: A Statistical Report. Delaware, Ohio: Ohio Wesleyan University, 1967.

19. Trezza, Alphonse. "National Inventory of Library Needs, 1975." In The Bowker Annual of Library and Book Trade Information, 22nd edition, New York: R. R. Bowker, 1977.

20. National Inventory of Library Needs. Chicago: American Library Association, 1975.

21. Learmont, Carol and Darling, Richard. "Placements and Salaries, 1975." In The Bowker Annual. 22nd edition. New York: R. R. Bowker, 1977.

22. Learmont, Carol and Darling, Richard. "Placements and Salaries, 1976: A Year of Adjustment." In The Bowker Annual, 23nd edition. New York: R. R. Bowker, 1978.

23. Learmont, Carol. "Placements and Salaries, 1979: Wider Horizons," Library Journal, 105 (November 1, 1980): 2271-2277.

24. Savage, Noel. "News in Review, 1980," Library Journal, 106 (January 15, 1981): 109-124.

25. U.S. Department of Labor, Bureau of Labor Statistics. Library Manpower: A Study of Demand and Supply. Bulletin 1852. Washington, D.C.: Bureau of Labor Statistics, 1975.

26. U.S.Department of Labor, Bureau of Labor Statistics. Occupational Outlook Handbook, 1980-81 Edition. Bulletin 2075. Washington, D.C.: Bureau of Labor Statistics, 1980.

27. Mugnier, Charlotte. The Paraprofessional and the Professional Job Structure. Chicago: American Library Association, 1980.

28. Cottam, Keith. "Minimum Qualifications and the Law: The Issue Ticks Away for Librarians," American Libraries, 11(May, 1980): 280-281.

29. Ohio Board of Regents. Master Plan Review Committee on Library Science. The Education of Librarians, 1970-85. Kent, Ohio: School of Library Science, Kent State University, 1970.

30. Rogers, A. Robert. "More or Less? Forecasting Library Manpower in Ohio," Ohio Library Association Bulletin, 40 (October, 1970): 4-8.

31. "In the News," American Libraries, 12 (February, 1981): 63.

32. Lockwood, James D. "Last Rites for an Era? A Librarian's Views on What the Reagan Sweep Means for Libraries," American Libraries, 11 (December, 1980): 646-647.

33. Watkins, Beverly T. "NEA, 'In" During Carter Administration, Must Adjust to Being "Out" Under Reagan," Chronicle of Higher Education, XXII (April, 1981): 173.

34. "In the News," American Libraries, 12(April, 1981): 173.

35. Fields, Cheryl M. "Museums: 'Very Threatened' by Reductions of Art Agency, Abolition of Service Institute," Chronicle of Higher Education, XXII(March 30, 1981): 13.

36. Hook, Janet. "Reagan Proposes Cuts for Libraries, International Education, Renovation," Chronicle of Higher Education, XXII(March 16, 1981): 1.

37. "Washington Notes," Chronicle of Higher Education, XXII (April 20, 1981): 7.

38. Nielsen, Robert M. and Polishook, Irwin H. "The Impending Crisis of Higher Education," Chronicle of Higher Education, XXII (April 6, 1981): 9.

39. Sterrett, Steve. "House Approves Budget; Money Questions Remain," OSU On Campus, 10 (April 23, 1981): 1.

40. Karol, Nathaniel H. and Ginsburg, Sigmund G. Managing the Higher Education Enterprise. New York: John Wiley and Sons, 1980.

41. Carnegie Council on Policy Studies in Higher Education. Three Thousand Futures: The Next Twenty Years for Higher Education. San Francisco: Jossey-Bass Publishers, 1980.

42. Keefer, Gary. "Educator Sees Hard Times Ahead for Ohio's Colleges," Columbus (Ohio) Evening Dispatch, May 12, 1980.

43. Higher Education in Ohio Master Plan: 1976. Columbus, Ohio: Ohio Board of Regents, 1977.

44. "Chronicle Survey: Applications Are Up 10 Pct. for Next Fall's Freshman Class," Chronicle of Higher Education, XXII (March 30, 1981): 1.

45. Magarrell, Jack "The Enrollment Boom Among Older Americans: 1 in 3 College Students Is Now over 25 Years Old," Chronicle of Higher Education, XXII (May 4, 1981): 3.

46. Hook, Janet. "$100-Million Cut in U.S. Loan Funds to Near 70-Pct. Slash for Some Colleges," Chronicle of Higher Education, XXII (April 13, 1981): 1.

47. Watkins, Beverly T. "Michigan State's Budget Cut $13.5 Million; 368, Many with Tenure, Face Loss of Jobs," Chronicle of Higher Education, XXII (April 13, 1981): 1.

48. Patterson. Lewis. Costing Collegiate Cooperation. A Report on the Costs and Benefits of Interinstitutional Programs with Consortium Case Studies and Guidelines. University Alabama: Council for Interinstitutional Leadership. October, 1979 (ED 180 341).

49. Watkins, Beverly T. "'Cooperative Ethic' Called Crucial for Colleges Survival," Chronicle of Higher Education, XXII (April 6, 1981): 7.

50. "Fact-File: 131 Voluntary Academic Consortia," Chronicle of Higher Education, XXII (April 20, 1981): 11.

51. Bidlack, Russell, comp. Statistical Data from the Annual Reports of Library Schools. Submitted to the Committee on Accreditation of the American Library Association for 1976-77 (1978).

52. Summers, F. William. "Library School Deans Consider Two-Year Programs but Ignore Alternatives at Columbia Conference," American Libraries, 11(May, 1980): 250-252.

53. Conant, Ralph W. The Conant Report: A Study of the Education of Librarians. Cambridge, Mass.: MIT Press, 1980.

54. Taylor, Robert S. Manpower and Educational Programs for Management, Research, and Professional Growth in Library and Information Services. Related Paper No. 6. Washington, D.C.: National Commission on

Libraries and Information Science. National Program for Library and Information Services, October, 1974.

55. Magarrell, Jack. "Shortage of Computer Sciences in U.S. Called Threat to Economic Development," Chronicle of Higher Education, XXII (April 6, 1981): 8.

56. King, Donald and others. "A National Profile of Information Professionals," Bulletin of the American Society for Information Science, 6 (August, 1980): 18-22.

57. Sellen, Betty-Carol. "A Survey of Graduate Librarians Working Outside of a Library," In What Else You Can Do with a Library Degree, edited by Betty-Carol Sellen. Syracuse, N.Y.: Gaylord Professional Publications, 1980.

58. Albrecht, Sterling and Redfield, Gretchen. "The Traditional Library Setting - Can It Meet the Professional's Needs," In What Else Can You Do with a Library Degree, edited by Betty-Carol Sellen.

59. Klement, Susan, comp. "Directory of Alternative Librarians in Canada," Canadian Library Journal, 39(April, 1977): 103-29.

60. Berry, John. "Escape form Libraries," Library Journal, 105 (November 1, 1980): 2249.

61. Press Release: Andrews Foundation Endows CWRU School of Library and Information Science. Case Western Reserve University, Office of Public Information, February 12, 1981 (mimeo).

62. Learmont, Carol L. and Darling, Richard L. "Placements and Salaries 1977: The Picture Brightens." In The Bowker Annual, 24th edition. New York: R.R. Bowker, 1979.

63. Learmont, Carol L. and Troiana, Richard. "Placements and Salaries, 1978: New Directions," Library Journal, 104 (July, 1979): 1415-22.

64. "Guidelines for Library Services to Extension/Noncampus Students: Draft of Proposed Revisions," College and Research Libraries News, 41 (October, 1980): 265-272.

65. "Miscellaneous," Library Marketplace, No. 10 (December, 1980): 6.

66. American Library Directory. 33rd. Edition. New York: R. R. Bowker, 1980.

67. Extension/Off-Campus Program Offerings. Committee on Accreditation, American Library Association, June 19, 1977 (mimeo).

68. Graduate Degree Programs -- Off-Campus Guidelines and Procedures for Review and Approval at Specific Sites. Approved by the Regents Advisory Committee on Graduate Study, Ohio Board of Regents, March 6, 1981.

69. McKeefery, William J. Cooperative Arrangement between Private and Public Colleges. Washington, D.C.: American Association of State Colleges and Universities, 1978.

70. Lepchenske, George L. Higher Educational Consortia Organization: Functional Structures of Administration and Management, May, 1976 (ED 176 619).

71. The Nature of Cooperation Between Kent State University and The Northeastern Ohio Universities College Of Medicine in Kent State University's Doctoral Programs. Kent State University, Kent, Ohio. May 1, 1976 (mimeo).

72. Patterson, Lewis D. Survival through Interdependence. AAHE-ERIC/ Higher Education Research Report No. 10. Washington, D.C.: American Association for Higher Education, 1979 (ED 183 116).

Appendix A

Coursework to be Offered in the Cleveland Area

Excerpt from Kent State's Report to the Committee on

Accreditation of the American Library Association

October 10, 1980

The School of Library Science will not attempt to offer a comprehensive program in Cleveland, but will limit its offerings to those which can be done well at the locations most conveniently accessible to students. For the foreseeable future, these locations and courses are as follows:

1. Mayfield Regional Branch

   L.S. 60600 - Foundations of Librarianship

   L.S. 60601 - Information Sources and Services

   L.S. 60608 - The Public Library

   L.S. 60612 - Library Materials and Services for Adults

   L.S. 60614 - Selection and Acquisition of Library Materials

   L.S. 60617 - Library Services to Children

   L.S. 60618 - Library Materials for Children

   L.S. 60626 - Library Materials and Services for Adolescents

   L.S. 60691 - Seminar in Storytelling

2. Maple Heights Regional Branch

   L.S. 60601 - Information Sources and Services

   L.S. 60612 - Library Materials and Services for Adults

   L.S. 60617 - Library Services to Children

   L.S. 60618 - Library Materials for Children

   L.S. 60626 - Library Materials and Services for Adolescents

   L.S. 60691 - Seminar in Storytelling

Appendix B

Nine Information Functions

Descriptions of Information Functions

1) **Managing Information Operations, Programs, Services, or Databases:** Includes planning, directing, or administering information operations, programs, services, or databases; establishing budgets, funding, and financial control; planning and controlling resource-sharing or networking activities; establishing and implementing security standards for information systems; forming and implementing corporate information policy; integrating information operations, programs, services, or databases with mission of parent organization; surveying users to establish information needs; promoting information products/services. Sample occupational titles: *Audio-Visual Administrator, Chief Programmer, Comptroller, Database Manager, Director of Information Center, Library Administrator, Library Director, Manager of Publishing Unit, Management Analyst, Media Manager, Science Editor,* and *Vice-President for Information.*

2) **Preparing Data or Information for Use by Others:** Includes technical writing (but not public relations promotions), editing, or other scientific publishing activities involving journals, technical reports, manuals, instructions, etc.; translating business, scientific, or technical works from one language to another; compiling bibliographies, reference materials, or referral materials, etc.; preparing abstracts, indexes, or catalogs; preparing lists or directories of people, buildings, events, etc.; establishing computer numeric or textual data input requirements; transforming data into form required by a computer system, operational system, or library; preparing other information materials, such as audiovisual and cartographic. Sample occupational titles: *Abstractor, Archivist, Bibliographer, Cataloger, Classifier, Librarian (Research), Librarian (Special Collections), Medical Records Specialist, Science Editor, Survey Data Editor, Technical Editor, Technical Writer,* and *Translator.*

3) **Analysis of Data and Information on Behalf of Others:** Includes researching and analysis (but not end use) of data or information from a library, computer file, or other database; analysis of data or information that goes beyond (but which may include) such activities as abstracting, or simple summarization of previously written materials, computer system output, or library materials. Sample occupational titles: *Analysis Specialist, Information Counselor, Operations Analyst, Research Assistant, Subject Matter Specialist (e.g. economic analyst, financial analyst, management analyst),* and *User Consultant.*

4) **Searching for Data and Information on Behalf of Others:** Includes diagnosing user needs for information, identifying data sources and developing search strategies; accessing databases either manually (library shelves) or electronically (automated systems); evaluating yield of data searches (but not performing analysis of data); referring users to other sources of data or information. Sample occupational titles: *Information Counselor, Reference Librarian, Reference Specialist, Referral Specialist, Searcher,* and *Technical Information Specialist.*

5) **Information Systems Analysis:** Includes analyzing existing work processes; determining feasibility of system automation; determining output product and form; selecting data or information for inclusion in system; recommending design alternatives; evaluating information systems, products, or services. Sample occupational titles: *Computer Systems Analyst, Chief Programmer, Data Processing Systems Analyst, Operations Researcher, Senior Programmer, Software Specialist, Systems Analyst,* and *Word Processing Systems Analyst.*

6) **Information Systems Design:** Includes designing new systems or modifying existing systems; establishing procedures for carrying out work processes; implementing the systems design; evaluating system output to ensure that it meets user requirements; documenting the procedures involved in using the system, for system personnel and for users. Sample occupational titles: *Computer Systems Planner, Database Designer, Methods Analyst, Operations Designer, Senior Programmer, Systems Designer, Systems Project Planner,* and *Word Processing Systems Planner.*

7) **Operational Information Functions (excluding management):** Includes supervising the running of a library or automated information system; controlling and facilitating access procedures; developing and implementing procedures for data input to systems (including library acquisitions); developing and implementing software packages for computer systems; designing applications programs to fit user needs. Sample occupational titles: *Applications Programmer, Archivist, Audio-Visual Specialist, Computer Specialist, Computer System Consultant, Database Administrator, Librarian (Acquisitions), Librarian (Medical Records),* and *Librarian (Special Collections).*

8) **Educating or Training Information Workers:** Includes teaching courses on information subjects to undergraduate or graduate students; training information professionals or workers on the job or in workshops or seminars; planning information education programs; developing information curricula; research on information education (but other information research is included in Function 9). Sample occupational titles: *Faculty Member (College or University), Instructor, Lecturer,* and *Training Officer.*

9) **Information Research & Development:** Includes studying the foundations, laws, theories, and postulates related to information and information systems, operations, programs, services, or databases; performing research on the creation of new forms of information systems, operations, products, processes, services, etc.; developing models of information systems or operations; designing, collecting, and analyzing secondary and primary data in information research; research on the use of information systems, products, or services; research on information user behavior and characteristics. Sample occupational titles: *Communications Researcher, Computer Scientist, Information Scientist, Library Scientist, Persons with Methods Expertise (e.g. operations research, psychology, statistics, systems analysis),* and *Persons with Subject Expertise (e.g. behavioral science, engineering, mathematics, philosophy, semiotics).*

Donald King and others, "A National Profile of Information Professionals," Bulletin of the American Society for Information Science 6 (August 1980): pp. 19, 20.

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Appendix C

Personnel Definitions

Definitions

For purpose of this study, personnel positions were defined in terms of categories used in annual surveys of the Planning, Evaluation and Research Unit of The State Library of Ohio, as follows:

A. For academic, public, and special libraries

1. Professional library positions

academic: The number of professional staff corresponds to the sum of three professional categories reported annually to The State Library of Ohio, namely a) number of chief, deputy, associate, and assistant chief librarians, b) number of all other librarians, and c) number of other professional staff on library budget.

public and special: The number of professional staff corresponds to the total number (FTE) of librarians, media and audiovisual specialists, etc. holding a graduate degree in any field. Staff with bachelor's degrees or less are not included in this total.

2. Support staff positions

academic: The number of support staff (FTE) equals the total number of technical, clerical and other supporting staff on library budget, as reported annually to The State Library of Ohio. Maintenance, custodial, and student personnel are not included in the support staff total.

public and special: The number of support staff (FTE) equals the number of technical, clerical and other staff PLUS THE NUMBER OF LIBRARIANS, MEDIA, AND AUDIO-VISUAL SPECIALISTS WITH A BACHELOR'S DEGREE OR LESS. Maintenance and plant operation are not included in this figure.

B. For school libraries

1. Certificated: The number of librarians (FTE) who hold a valid certificate for library science or educational media.

2. With master's degree: The number of certificated librarians (FTE) who hold a master's degree in library science or educational media.

Appendix D

Periodicals Included in Reading Lists of Selected KSU-SLS Core Courses and Electives

L.S. 50583: Newspaper and mass media libraries

Special Libraries
Aslib Bulletin
Aslib Proceedings
Junior Librarian
Wilson Library Bulletin
Library Journal
South African Libraries
Illinois Libraries
Library Association Record
Tennessee Librarian
D.C. Libraries
Arkansas Libraries
Library Herald
RQ
Library Occurrent
Show-Me Libraries
Louisiana Library Association Bulletin
Texas Library Journal
Kentucky Library Association Bulletin
Feliciter

L.S. 60600: Foundations of librarianship

Library Journal
Library Trends
ALA Yearbook
Bowker Annual

L.S. 60602: Organization of library materials

Cataloging and Classification Quarterly
Library Resources and Technical Services
Library Quaterly
Library Technology Reports
American Libraries
Journal of Library Automation
Advanced Technology Libraries
Alternative Catalog Newsletter
Cataloging Bulletin (Hennepin County Library)
OCLC Newsletter
RTST Newsletter
Cataloging Service Bulletin (L.C.)
Information Bulletin (L.C.)

L.S. 60604: Introduction to library science research methods

Libri
Unesco Bulletin for Libraries
American Libraries
Library Trends

Utah Libraries
California Librarian
Wilson Library Bulletin
Information Processing and Management
College and Research Libraries
Special Libraries
Journal of Academic Librarianship
Illinois Libraries
Drexel Library Quarterly
School Media Quarterly
Library Quarterly
Journal of Education for Librarianship
Library Research
Aslib Proceedings
Catholic Library World
JASIS
Journal of Documentation
Journal of Library Automation
Journal of Library History
Library and Information Bulletin
Library Journal
Library Resources and Technical Services
Progress in Library Science
Research In Librarianship
International Library Review

L.S. 60607: The school library

Audiovisual Instruction
School Media Quarterly
Wilson Library Bulletin
School Libraries
Drexel Library Quarterly
School Library Journal
Wisconsin Library Bulletin
Idaho Librarian
BCLA Report
Wilinois Libraries
California School Libraries
American Libraries
Hoosier School Libraries
Louisiana Library Association Bulletin
Virginia Librarian
New Jersey Librareis
Canadian Library Journal
Mississippi Library News
Learning Today
Catholic Library World
Wyoming Library Round-up
Library Trends
Horn Book
Top of the News

Bay State Librarian
Newsletter on Intellectual Freedom
Pennsylvania Library Association Bulletin
PNLA Quarterly
Southeastern Librarian

L.S. 60608: The public library

PLS Newsletter
Library Trends
Library Quarterly

L.S. 60610: Library management

OLA Bulletin
College and Research Libraries News
Journal of Academic Librarianship

L.S. 60615: The academic library

College and Research Libraries
Wilson Library Bulletin
Library Journal
College and Research Libraries News
Journal of Academic Librarianship
Library Quarterly
Library Technology Reports
RQ
American Libraries
Catholic Library World
Illinois Libraries
JASIS
International Library Review
Journal of Library Automation

L.S. 60624: The art library

Arlis Newsletter/art Libraries Journal
Library Trends
Special Libraries
Assistant Librarian
Colege and Research Libraries
PLA Bulletin
Worldwide Art and Library Newsletter
Information Storage and Retrieval
New Jersey Libaries
Choice
Library Resources and Technical Services
Catalogue and Index
Pennsylvania Library Association Bulletin
Learning Today
Archives

AB Bookman's Weekly
College and Research Libraries
Library Quarterly

L.S. 60631: Historical foundations of libraries and reading matter in the western world

Journal of Library History
Library Journal

L.S. 60634: Library services to ethnic communities

Library Trends
Library Journal
Journal of Library History
Audiovisual Instruction
Illinois Libraries
Catholic Library World

L.S. 60651: Library service at the state level

Illinois Libraries
Pennsylvania Library Association Bulletin
North Dakota Library Notes
Library News Bulletin (Washington State Library)
Vermont Libraries
News Notes - California Library
Texas Library Journal
Library Trends
American Libraries
Georgia Librarian
Kansas Library Bulletin

Appendix E

Guidelines for Library Services to Extension/Noncampus Students: Proposed Revisions

Guidelines

1. *Finances*

Noncampus/extension library services cannot be assured unless adequate financing is provided. therefore:

a. Library services for noncampus/extension purposes should be financed on a regular basis.

b. Funds should be budgeted specifically for the purpose of providing library resources to noncampus/extension students.

c. The amount spent for noncampus/extension students should be comparable to the per student expenditures for campus students and/or proportional to the level and complexity of campus programs.

2. *Personnel*

The task of providing library resources, services, and facilities for noncampus/extension courses must be assumed by competent library personnel, therefore:

a. Library personnel should be given the specific responsibility for identifying information needs and making appropriate arrangements for delivery of materials and services to noncampus courses.

b. Staffing requirements for off campus programs depend upon the nature and level of the courses offered. They should be comparable to the staffing requirements identified in the *Standards for College Libraries* (Formula B).

c. It is the task of library personnel in charge of noncampus/extension needs to consider, in consultation with necessary faculty and library staff, the library needs for any existing or proposed noncampus/extension course and then determine how these needs can be provided for. If, in the opinion of the librarian and the instructor, adequate library resources cannot be made available, the course should not be approved.

3. *Facilities*

One of the following arrangements should be met in an effort to satisfy the need for library facilities to noncampus/extension students:

a. Establishment of a branch library should be considered if a large number of classes are offered in an off campus area.

b. Contract with local public libraries or any other library in the area to provide facilities to noncampus extension students.

c. Arrangement with the instructor of the noncampus extension class to transport resources needed by students from the main campus to the class location.

d. Provision of a cooperative branch library service among area academic libraries. If service does not exist but is feasible, plans should be made to formulate such.

4. *Resources*

The provision of library resources is a crucial aspect to any noncampus/extension course, therefore:

a. The noncampus/extension library service coordinator will make sure that all the resources needed by students in preparing for a noncampus/extension course are made available either through cooperative arrangement with other libraries or systematic collection development.

b. Depending on the nature and level of off campus programs, the rate of collection development for noncampus/extension programs, whether in terms of dollars or resources, should be comparable to the main campus.

5. *Services*

The following library services should be provided to noncampus/extension students:

a. Access to library resources and assistance in library use should be available to noncampus/extension students as is normally available to campus students.

b. Noncampus/extension students should have the opportunity to take library orientation tours at the library which will extend library services to them during the course of the semester.

c. Noncampus/extension students should have access to periodicals, reserve collections, and any other collections normally available to campus students.

d. Access to online literature search service should be available to noncampus/extension students as is normally available to campus students.

"Guidelines for Library Services to Extension/Noncampus Students: Draft of Proposed Revisions," College and Research Libraries News, 41 (October, 1980): 265-272.

Draft of Proposed Revisions

What follows is a set of proposed revised guidelines for library services to noncampus/extension students based on the original guidelines published in 1967. As the guidelines have been revised, so have the assumptions upon which they are based.

Assumptions

1. As with campus courses, library services are an integral part of the quality of credit noncampus/extension or night courses offered by an academic institution.
2. If a university or college assumes a responsibility for the provision of library services for its campus courses, it should also assume the responsibility for providing adequate library support for its noncampus/extension courses. This provision may be achieved through a variety of ways, but the ultimate responsibility rests with the institution.
3. The level of support for noncampus/extension courses, including printed materials as well as nonprint or audiovisual materials, should mirror the level of support for campus courses at both the graduate and undergraduate levels. The following types of noncampus courses necessitate library support as determined by instructors of noncampus/extension courses and library extension personnel:
   a. Credit courses: require the active support of library resources as an extension of the classroom.
   b. Independent study: this type of course often involves the active pursuit of a variety of library resources by a student and thus the full range of library services is necessary.
   c. Courses offered through electronic media: since in many cases the student in this type of course has limited personal access to the instructor, library services often must take up the slack. In many cases, students requiring materials for such courses must obtain them from libraries.
   d. Noncredit courses: this type of noncampus course has the broadest span of subjects and therefore library needs are difficult to assess. Since the course is not for credit, often the need for print materials is not as intense. However, library resources should be available and at times such resources may be essential to the course.

Definitions

It is necessary to the clarity of the proposed revised guidelines that one term be defined.

Noncampus/extension course: This term applies to any course offered by a college or university which does not utilize normal campus classrooms and facilities during normal campus class times. The term covers courses which meet as a class off the main campus, courses which may meet on campus but not during times when normal campus activities are in operation, and courses offered through electronic media or correspondence.

In reference to library services, a noncampus course is any course which does not have access to full library services on equal par with regular campus courses.

The term, with these connotations, is used as follows:

noncampus/extension courses
noncampus/extension/library services, resources, facilities
noncampus/extension student

In order to insure the provision of adequate library services, resources, and facilities for the noncampus/extension student, what follows serves as guidelines for the institution's responsibility of providing library support for its noncampus/extension course offerings.